

IRAN'S SEA POWER STRATEGY: GOALS AND EVOLUTION

A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE

by

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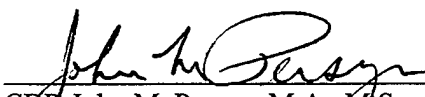
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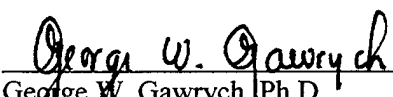
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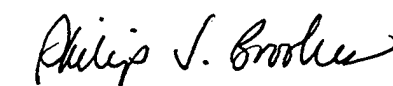
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ABSTRACT

IRAN'S SEA POWER STRATEGY: GOALS AND EVOLUTION by LCDR John G. Walker, USN, 155 pages.

This thesis examines the intent of Iran's sea power strategy, and discovers that it is a definitive component of a coherent national security strategy of strategic deterrence designed to protect its strategic center of gravity--its oil. Furthermore, as the operative component of its national security strategy, Iran's national military strategy focuses on deterrent regime of weapons of mass destruction, and a credible deterrent sea denial capability to threaten the Gulf shipping. Iran's sea denial capability stems from the six components of its sea power force structure; submarines, mines, coastal-based antiship cruise missiles, missile armed corvettes, naval special warfare forces and maritime strike Air Force. While not in its interest to actually carry out, Iran's threat of to Gulf shipping is the sources of its freedom to maneuver.

Four factors limit Iran's sea power strategy; its current sea power capability, its political construct, domestic socioeconomic pressures, and Iran's historical sense of superiority and isolation.

Iran's sea power will contribute to its probable return as the dominant power in the Gulf and the reassertion of its perceived role as a Pan-Islamic leader in the region. Of significance, Iran is not interested or capable of directly challenging the United States military.

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CHAPTER 1

INTRODUCTION

More than 20 percent of the world's annual oil production passes through the Persian Gulf's Straits of Hormuz. Furthermore, the Gulf region contains at least 65 percent of the world's proven oil reserves. Further amplifying these simple facts is the reality that Gulf states provide Japan 90 percent of its oil and Europe roughly 30 percent of its total requirements. The increasing globalization of the world's developed economies and their associated interdependent reliance on Gulf oil suggest that a sudden, long-term (greater than six months) closure of the Straits of Hormuz (SOH) and subsequent halt to Gulf oil shipments would represent a global financial catastrophe.¹

Acutely sensitive to this vulnerability, most Western nations, including the United States, have defined the flow of reasonably priced oil through the SOH as a vital national interest.² The Department of Defense's *United States Security Strategy for the Middle East* states:

- The world will be even more dependent on Persian Gulf oil in the early 21st century than it is today.
- As long as the United States is a maritime commercial nation with global interests, it will have a stake in protecting freedom of navigation and access to regional markets.
- The United States must therefore remain engaged in the security of the Gulf diplomatically, economically, and militarily.³

Former Secretary of Defense William J. Perry has summarized the daunting challenge of achieving Gulf security, noting that the region represents "a poverty of every resource except the one that has prompted three major US force deployments in less than three years--oil."⁴

Potential threats to the stability of the Gulf region are numerous and complex. However, Iran in particular presents the single, most significant threat to Gulf oil flow through the SOH. Iran has been and remains a major regional power.

Although it has become somewhat more pragmatic, the Islamic Republic retains its identity as a revolutionary state that supports the expansion of fundamentalist Islamic theocracy. With the goal of achieving strategic and regional power, Iran has extended its influence outside the Gulf, particularly through its perceived ability to destabilize other governments in the region. In Sudan's ongoing civil war, Iranian economic support and military assistance to the ruling government raise the possibility of Iranian influence in the control of the strategically important Red Sea. Some reports indicate that Sudan may allow Iran to establish a naval base at the centrally located Red Sea port of Port Sudan.⁵ This large, improved facility lies equidistant between the strategically important Suez Canal and the southern Red Sea choke point of the Bab el Mandeb. Although implausible, Egyptian President Hosni Mubarak recently warned that Iran's establishment of a naval base in Sudan could lead to war between Iran and Egypt.⁶

Additionally, Tehran continues to expand its influence in the newly independent Muslim states of Central Asia, primarily through economic and commercial arrangements, the establishment of embassies, and programs that stress common religious ties. To counter Iran's influence in this region, Russia has begun to reassert itself through military, political, and economic means.⁷

To complement its efforts in the Gulf and Central Asia, Iran cultivates relationships with Muslim nations in the Far East. Following his high-visibility visits to Malaysia, Indonesia, and Brunei, Iran's President Rafsanjani boasted that the Islamic Revolution and the Islamic Republic of Iran have a "salient" impact and influence over these countries.⁸

The United States considers Iran to be the foremost state sponsor of terrorism in the world. Iranian covert and overt assistance sustains extremist and terrorist movements throughout the Middle East, and it stridently opposes the Israel-Palestine Liberation Organization peace settlement. Most estimates of Iran's investment in terrorism range upwards of one billion US dollars. Groups trained, armed, or funded by Iran include radical Palestinian groups and the Lebanon-based Hizbollah.⁹

For many Western military planners Iran has become the primary threat in the region. Iran is forcing the US to improve its power projection capabilities in the Gulf at a time when it is making major cuts in its total defense spending. Both the US and Britain have considered Iranian conflict scenarios in their contingency planning and in discussions with French military planners. The perceived threat posed by Iran, and the possibility of a resurgent, expansionist Iraq, are leading Saudi Arabia and Kuwait to expand their forces for future war while still under the intense financial pressures of paying the costs of the 1991 Gulf War. Bahrain, Qatar, and the United Arab Emirates are also expanding their forces and strengthening their arrangements for military cooperation with the US and Britain.¹⁰ The commander of US forces in the Gulf region, General J. H. Binford Peay, recently stated:

Iran's continuing military buildup, particularly in the southern Arabian Gulf, underscore their desire to become the dominant force in the region. Iran remains the single greatest long-term threat to peace and stability in the Central [Gulf] region.¹¹

Not surprisingly, Iran has a very different view of its standing in the Gulf. Iran sees itself as friendless in a hostile world; persecuted because it remains "true to its [Islamic] values." Accordingly, Iran perceives itself as compelled to fervently protect its own vital national security interests. Iran views its national security interests as twofold: first, its near total dependence on oil revenues for its economic stability (and dependent internal stability) creates an easily exploitable vulnerability that Iran must safeguard; second, Iran's perceived vital national interest

that it must eventually achieve some degree of hegemony in the Gulf region. Iran believes it should play a greater part in the Gulf because of its geopolitical size (its population is greater than all other Gulf states combined and its littoral area occupies nearly half of the Gulf's coastline), its self-appointed status as Middle East's pan-Islamic leader, and its historical domination of the Gulf region. Iran does not accept the existing international order as just, and continually seeks to improve its standing and status in the hierarchy of nations. While this line of reasoning has been toned down significantly in Iran's foreign relations, it does, to some degree (although probably overestimated by Iran's leaders), have a unifying effect on the Iranian body politic.¹²

Iran's first vital interest, oil production and its subsequent export through the Straits of Hormuz, has provided the locus for the Iranian economy for more than seventy years. Accordingly, Iran's leaders long identified Iran's oil (production and transportation infrastructure) as its strategic center of gravity (SCOG) and, at least since the latter half of Reza Shah's rule in the late 1930s, developed a national security strategy (NSS) to protect this SCOG.¹³

A nation's SCOG is defined as that characteristic, capability or locality from which a state derives its freedom of action or physical strength. A NSS is defined as the application of national power (military, diplomatic, economic, and informational) to achieve objectives, or security imperatives, that contribute to national security. A national military strategy, or NMS, is defined as the application of the state's military power to attain national objectives.¹⁴

Iran's NMS has historically focused on two objectives: first, the defense of Iran's oil production areas (located primarily in the western portion of the country along the Iraqi border); second, its capacity to control Gulf shipping, both to defend its own oil transportation and shipping facilities in the Gulf region (90 percent of Iran's oil must pass through the Gulf's Straits

of Hormuz), and to interdict the shipping of other states, as necessary. Despite severe economic problems, Iran continues to invest a significant amount of its resources, and the overwhelming majority of its military budget, to achieve these objectives.¹⁵

Iran's second vital national interest, its perceived need for ascendance in the hierarchy of nations, manifests itself as an attempt to regain what it regards as its traditional position of preeminence in the Gulf. Iran's drive for dominance of the Gulf region supports its national security imperatives by giving it more freedom to protect its SCOG. With greater political-military power, Iran can concurrently reduce the risk of Gulf instability (on its terms), as well as deter actions that could endanger its SCOG. Moreover, Iran's drive for ascendancy in the Gulf region includes other political and economic factors such as its ideological charge to spread the "Islamic Revival."

Iran's quest for preeminence in the Gulf is clearly evident in its military strategy. The Islamic Republic's acquisition of modern submarines, advanced fighter aircraft, antiship missiles, the reinforcement of southern Gulf islands, and its burgeoning weapons of mass destruction (WMD) program testify to its capacity to interdict strategic sea lines of communication (SLOC) in the Gulf region and eventually, given its current rate of progress, the ability to deliver theater-range (2,000 km) WMD.¹⁶

Iran has purposefully developed a military force that must be reckoned with. The US, smaller Gulf states (UAE, Qatar, and Bahrain), and most industrialized Western countries view Iran's efforts to control the Gulf's waterways as a menace to Gulf stability and a direct threat to their vital national interests. Gulf stability is defined both as the absence of armed conflict in the Gulf region, and as the safekeeping of geopolitical and economic relationships among Gulf region states and states that depend on Gulf oil.¹⁷

Nevertheless, Iran's resurgence as a military power enables it to operationalize its perception as the Gulf's legitimate regional leader. Iran's military resurgence has confirmed its accession as the Gulf's dominant naval power, its establishment as one of the region's significant airpowers, and its status as an incipient nuclear power.¹⁸

To further its regional aspirations, Iran has developed a variety of geopolitical themes. These include regular appeals for Gulf solidarity and a ceaseless condemnation of US force presence in the region. An example of the first theme is Iranian President Rafsanjani's regular calls for Gulf states to adopt a "regional realistic approach toward ensuring Persian Gulf security." This approach features Iran, the area's largest state, as the centerpiece guarantor of Gulf stability. Iran consistently features this thesis at its annual, well-attended seminar on Horizons for Cooperation in the Persian Gulf and the Oman Sea, now in its seventh year.¹⁹

Iran's regional policy follows a logical process, acknowledging that access to Gulf oil is critical to the world's industrialized economies. In addition, Iran's argument contends that the frequent conflicts that challenge Gulf stability should be solved regionally. Iran's leaders publicly state that "[Gulf] instability will benefit no country . . . and [will] indirectly, or directly affect the whole world." Some countries in the Gulf region see at least some merit in Iran's rationale for a regional power system. For example, during an October 1996 signature ceremony marking the conclusion of the new Iranian-Omani SOH security cooperation agreement, Oman's senior naval officer, Rear Admiral Shahab bin Tareq, noted that formal military cooperation between the Islamic Republic and Oman was an incremental first step to a larger security relationship that will eventually guarantee "calm and security" in the Gulf region.²⁰

A related Iranian line of reasoning, also appealing to the Islamic populations in the region, is a call for Gulf states to eliminate the regional presence of non-Gulf nations (primarily the US), arguing that such presence is destabilizing. This theme, which often exploits highly

visible contingency deployments or exercises of US ground troops, is particularly effective in inflaming dissident activity in Gulf Cooperation Council countries with active opposition movements.²¹

President Rafsanjani recently summarized Iran's rationale for the development of Gulf regional security system and the expulsion of US forces from the Gulf in his weekly sermon on Iranian state radio:

Suspicious moves by Iraq that lead to US military buildup in the region involve heavy expenses which are met by Saudi Arabia, Kuwait, and the United Arab Emirates. . . . Regional countries should provide [for] the security of the Persian Gulf without having to pay tolls to American troops. . . . The US military presence in the region [is] due to the incorrect understanding of the Persian Gulf littoral states.²²

The West's assessment of Iran as the primary threat to Gulf stability is clearly incompatible with Iran's paternalistic self-promotion as the region's legitimate ascendant and guarantor of Gulf's security. More importantly, Iran's capacity to interdict Gulf shipping with its burgeoning Navy and maritime strike Air Force demonstrates a tangible commitment to a sea power component of a larger national military strategy (NMS) that protects its SCOG and denies the use of Gulf region waters to its potential adversaries. More definitively, Iran's NSS imperatives of Gulf preeminence and SCOG protection are supported primarily by its NMS. In turn, Iran's sea power strategy is the primary component of its NMS.

The global implications of a militarily resurgent Iran lead to this thesis's primary question. What are the goals and evolution of Iran's sea power strategy, and how does it support Iran's national security strategy and interests? Satisfaction of this question requires the resolution of three subordinate questions:

1. What are the historical forces and wartime experiences that have shaped Iran's sea power strategy?

2. What components within Iran's military force structure are use to support Iran's sea power strategy?

3. What limitations shape Iran's future sea power strategy?

This study establishes that Iran, first under Mohammed Reza Shah, and later under the Islamic Republic, correctly identified oil as its strategic center of gravity and developed two distinct sea power strategies to protect this vital interest: sea control under Imperial Iran, and sea denial under the current regime. Furthermore, the Islamic Republic emphasizes the deterrence capacity of its sea denial strategy.

Definition of Terms

Key terms require definition for effective discussion in subsequent chapters.

Sea power projection, often expressed as the US Navy's familiar doctrine *power projection from the sea*, is a state's capacity to project its naval power ashore. For example, the US Marine Corps has historically had the mission of seizing and defending advanced naval bases. Sea power projection is normally a tool use by states that have more advanced sea control capabilities.²³

The term sea power is composed of two components: naval power and maritime power. The term naval power refers to naval force and its application, or the use of military power in a maritime environment. Naval forces include surface warships, submarines, naval aircraft, and amphibious forces. Maritime power is a state's ability to use the seas to carry out the collective commercial functions necessary to seaborne trade. Naval power can support maritime power, but is not synonymous with it. As used in this thesis, sea power is the application of naval and maritime power on the high seas.²⁴

A state can apply sea power in two broad strategies to achieve specific objectives: sea control, and sea denial. The concept of sea control separates into two components: the capacity of a state to control sea lines of communication (e.g., the Straits of Gibraltar, and Straits of Hormuz) by first preventing or denying an enemy's naval and maritime forces from using the SLOC and second, by ensuring its own unimpeded naval and maritime access to that SLOC.

Sea denial is a spoiling strategy whereby a state is able to prevent an opponent's access to the SLOC. Sea denial does not imply a capability of the same state to ensure its own maritime access to that SLOC. Sea denial is inherently more economical (in terms of resources) and easier to achieve than sea control (with the same forces). Moreover, a sea denial capacity is inherent to states with sea control capability. For example, with its formidable submarine force, the US Navy could use a sea denial strategy to completely stop opponent shipping through the Straits of Gibraltar, while simultaneously using the sea control capability of its aircraft carrier battle groups to ensure the safety of its own shipping in the eastern Atlantic. Conversely, a state like Libya could, in several hours, even with its archaic Soviet-built gun boats and antiquated submarines, effectively mine the Straits of Messina, or Port Said, denying these vital areas for weeks. The historic term '*guerre de course*', literally a "war of the race" directed at the enemy's merchant shipping, is an example of a sea denial strategy. Another example of sea denial is the use of shore batteries (e.g., Dardanelles) to deny access to a narrow strait.

Construct of the Study

This study demonstrates that the Shah's sea power strategy of sea control had two fundamental flaws. First, given Iran's significant economic limitations, the most critical portions of its sea power strategy (hundreds of advanced fighter aircraft like the F/A-18, F-15 and F-16, AWACS, a futuristic integrated air defense system, dozens of modern ships, submarines and

aircraft carrier-based airpower), were never affordable. Also, that Iran's meager capacity to absorb advanced technology exacerbated this deficiency and assured the poor integration and support of sophisticated equipment that was delivered as part of this plan.

Second, Imperial Iran's sea control strategy, while intended to give the Shah broad (offensive and defensive) options, depended almost exclusively on the US for arms, maintenance, training and US military support of the Central Treaty Alliance (CENTO), particularly if Iraq or the Soviets attacked. Because of this dependence, and the strategy's inherent unaffordability, Iran's sea control strategy could never have given it the independence required to protect its SCOG. Moreover, with the onset of the Islamic Revolution, and the subsequent loss of US support, the Iran-Iraq War demonstrated Iran's sea control strategy was impossible in practice as well as in theory.

This study traces Iran's sea power strategy using a multi-part analysis including a historical review of the transition of Iran's sea power from the Pahlavi dynasty to 1997, and an analysis of Iran's current sea power force structure, including its capabilities and training. Once the sea denial nature of Iran's current sea power strategy is established, the study will set forth evidence that the Islamic Republic sea denial strategy is unmistakably deterrence oriented.

Chapter 2 presents a historic overview of Iran's security strategy and its transition through the Pahlavi dynasty up to the Iranian Revolution. This chapter focuses on the development of Iran's military force structure, the Shah's relationships with the US and within CENTO, the Shah's sea power strategy, and the intended end state of the Shah's military buildup.

Oil export has been vital to the stability of Iran since the mid-1920s. Chapter 2 demonstrates that the most important, and most vulnerable component of Iran's center of gravity has always been oil flow through the SOH, and that the last Shah intended to protect Iran's vital

oil flow leg controlling the Gulf and its seaward approaches, using the sea power strategy of sea control. Under Mohammed Reza Shah, Iran was building a massive sea power projection capability to control these areas. This capability was to feature a large combatant navy, to include modern submarines, a variety of maritime strike aircraft, and eventually a light aircraft carrier. To defend Iran against counter attack, and to provide an umbrella for his naval forces, the Shah intended to build a massive integrated air defense system with modern fighter aircraft, airborne early warning planes (AWACS), aerial tanker aircraft, surface-to-air missiles and advanced raiders integrated with a series of computer driven data links to allow centralized command and control of air defense forces.

In addition to this analysis, Chapter 2 presents evidence that the Shah's grand sea power dreams of sea control of the Gulf were never sustainable given the poor development of Iran's technical infrastructure. The onset of the Iran-Iraq War caught Iran's massive Navy and Air Force buildup at an immature stage. This was the primary ingredient to the poor performance of Iran's Navy and Air Forces.

Chapter 3 traces the transition of Iranian sea power strategy from sea control to the Islamic Republic's strategy of sea denial. This chapter follows the Iranian military's transition through the upheaval of the Iranian Revolution and, the incorporation of the military into the Islamic Revolution. Subsequent to this description, Chapter 3 demonstrates the effectiveness of the Islamic Republic's sea denial strategy during the Iran-Iraq War. Chapter 3 uses Iran's successful sea denial experiences in the Iran-Iraq Tanker War (1984-1988), and the Iranian Navy's poor performance during the 18 April 1988 direct confrontation with the U.S. Navy--known as 'Battle of the Frigates'--as evidence to support Iran's continuing drift toward its current and more affordable strategy of deterrent sea denial.

Since 1990, Iran's deterrent sea denial strategy has provided it very effective political leverage over other Gulf states and the West. Chapter 4 describes Iran's current sea denial capabilities, including a full description of its weapon systems and most recent training efforts, to demonstrate its commitment to rapidly and effectively close the SOH, strike shipping throughout the Gulf, and defend its Gulf island holdings. Iran's new sea denial deterrent leverage continues to grow in its effectiveness, and it has already enabled it to influence one Gulf state (Oman) to conclude a formal security agreement with the Islamic Republic.²⁵

The purpose of Chapter 5 is to outline factors internal to Iran that limit Iran's sea denial strategy to a deterrent capability vice a strategy that attempts to ensure/guarantee a successful defense of its SCOG. This chapter establishes reasons why Iran will not actually threaten Gulf shipping, and why the intrinsic cost effectiveness of Iran's credible sea denial deterrent strategy achieves its external policy goals while simultaneously reinforcing internal stability. Chapter 5 provides evidence that Iran's political, religious and socioeconomic structures drive the Islamic regime toward actions which support Gulf stability, and that, in strategic terms, this is translated into a deterrent strategy that protects Iran's SCOG interest using sea denial, WMD, and ultimately the development of a Gulf regional security system with Iran as its leading state. This chapter describes the Islamic Republic's strategic decision making processes and details factors that limit the clerical leadership's freedom of action. Chapter 5 asserts that the fragmentary nature of Iran's political system causes it to function on consensus and that the fallout of this is tendency of the system, and consequently the regime's top leadership, toward moderation.

Chapter 5 also outlines the tenuous legitimacy of Iran's Islamic regime as interpreted by Iran's overwhelming Shia Muslim majority; this factor limits actions by Iran's clerical leaders which could potentially disrupt Gulf stability. This chapter provides evidence that Iran's

collapsing socioeconomic system puts limitations on the Islamic Republic's political and military goals and focuses them on Gulf stability and a deterrent sea power strategy.

Chapter 6 summarizes the conclusions of the analysis and, using the historical record to date, estimates that Iran's sea power strategy of deterrent sea denial will continue in its current direction; that this strategy will continue play a large role. This chapter also brings to light the significant domestic benefits that the Islamic Republic draws from its expansionist or "assertive Islam."

Assumptions and Limitations

In examining Iran's sea power strategy, several limits and assumptions have been accepted to ensure the efficiency and effectiveness of the analysis. The study will use weapon systems parameters found in open source descriptions of capabilities and functions, and their effectiveness as they pertain to Iranian naval power. Given this limitation, the thesis will neither address nor attempt to forecast the future impact of Iran's sea power in the Gulf region, or its implications for developed nations that depend on Gulf oil. Although the study will estimate the future direction of Iran's sea power strategy, it is not intended to develop policy recommendations for US decision makers; nor is it intended to be a comprehensive history of the Iranian Navy and Air Force. The principal intent of the thesis is to demonstrate the historical development and current effectiveness of Iran's present sea power strategy.

The thesis accepts several assumptions. First, oil exports are Iran's strategic center of gravity (SCOG); they have been vital to its stability and freedom of action since the mid-1920s. Second, the historical background from the reign of the Pahlavi Shahs through the post-Iran-Iraq War sea power buildup (1932-1997) provides the framework for Iran's current sea power

strategy. This assumption is based on the fact that before 1932 (other than a few tax collection vessels to restrict smuggling), Iran had no appreciable Navy.²⁶

Another assumption disclosed in the course of the study's research suggests that Iran's economy, although severely constrained by US-led sanctions, remains viable (not in danger of imminent collapse) and continues to grow slowly. Although modest, this promising direction, coupled with Iran's increasingly favorable business climate, indicates that Iran is likely to increase its influence in the Gulf region. Accordingly, to meet its influence objectives, Iran will continue to expand its sea power capacity both in capability and in application.

The thesis also accepts a series of assumptions to reduce the often distracting debates regarding the economic importance of Gulf oil and its relationship to the global economy. First, growth in the globalization of industrialized economies will continue. Second, the economic stability of industrialized nations depends on a consistent, secure access to reasonably priced oil (defined as no more than \$30 1997 US dollars per measurement of 42 imperial gallon barrel). Third, collective global sensitivity to disturbances in oil supplies is directly proportional to the depth of economic globalization. Increased sensitivity to shocks in oil supplies will result in a universal political response and probable military action. Last, national strategic stockpiles of oil in industrialized nations have only a limited psychological value and will be ineffective in a long-term (greater than six months) interruption in the flow of oil through the Gulf. Oil demand is normally inelastic; rising prices do not result in a proportional drop in consumption. This feature of oil demand has a profound negative impact on nations that import oil as the largest percentage of their total oil consumption (for example, Japan).²⁷

This thesis attempts to fill a gap in existing analysis regarding the character of Iran's sea power strategy. Available open source literature provides mainly indirect discussions concerning elements of Iran's sea power strategy. Principal sources include security policy

analysis and naval force estimates. Notwithstanding the absence of literature bearing directly on the thesis, the friction among Gulf states and states that depend on Gulf oil produces a significant amount of published material. This category of data focuses on US policy toward Iran. Alon Ben-Meir's March 1996 *Middle East Policy Journal* article, "The Dual Containment Strategy Is No Longer Viable," provides a representative example of this material. Of note, Ben-Meir's article concludes that permanent stability of Gulf oil flow is contingent on a new US policy of passive engagement, and that passive engagement has the potential to bring positive internal political change to Iran.²⁸

The second major category of published material centers on the analysis of Iran's naval forces and their application in the Gulf region. Silverberg and Tusa's August 1995 *Armed Forces Journal* article, "Shadow over the Gulf: Iran Is Preparing--But for What?" is representative of this group of literature. The Silverberg-Tusa article discusses Iran's "mixed bag of everything from rubber speed boats to three Russian Kilo-class submarines." This article contains an interview quote from a senior official of the National Defense University that typifies the assessment of this category of data, "Nobody knows what their policy goals are, including the Iranians."²⁹ Although a wealth of analytical information is available regarding Iran's naval inventory and Iran's role in the international arena as a policy-making state, there are few open source materials that clearly describe either Iranian security or sea power strategy.

¹Dan Caldwell, "Flashpoints in the Gulf; Abu Musa and the Tunb Islands," *Middle East Policy* (March 1996): 50-57.

²United States Central Command (CENTCOM), Special Report: Challenges in the Central Region, November 1992, 9-86.

³Office of the Secretary of Defense, United States Security Strategy for the Middle East, May 1995, 3.

⁴*United States Security Strategy for the Middle East*, 1.

⁵"Egypt Threatens Iran," New York Times, 18 April 1993, 8

⁶Ibid.

⁷Ibid.; and, Roland Dannruther, "Russia, Central Asia and the Persian Gulf," *Survival* 4, no.35 (Winter 1993), 92-112.

⁸"Realistic Approach Required For Persian Gulf Security," *Iran News*, in English, 5 November 1994, 1.

⁹"Presidential Executive Order Expands US Sanctions Against Iran," *US State Department Dispatch*, Volume 6, Number 19, 8 May 1995, 387-388; Bob Edwards, "Morning Edition," National Public Radio, 1045GMT, 29 April 1997, 1; and *US State Department Dispatch*, 8 May 1995, 2; Two tools that aid Iran's efforts to expand its regional influence are its foreign policy activities and its attempts to consolidate the Islamic Revolution; both are used as inexpensive diversions for its disenfranchised population. Most recently, Iran blamed its strained economic ties with the European Union on Washington's attempts to subvert Iran's legitimate interests in the Gulf. In reality, Iran's distressed economic relationship with Western Europe stems from its poor credit rating and its recent indictment in German Federal Court as a supporter of state sponsored terrorism. Moreover, shifting domestic attention from its shrinking economy is a significant preoccupation for Iran's leadership. The government focuses energies on a variety of distractions that include massive state intervention in the economy and economic programs that emphasize national self-sufficiency and personal sacrifice. In Iran's latest Five-Year Development Plan, the government noted that Iran is presently in need of "imports only in [a] few cases." The regime habitually underscores its bellicose "antiprofitteering" campaign, stressing that high prices, dwindling standards of living and hyperinflation will perpetuate until the market is 'Islamized', and until a "just distribution system is enforced in the country."

¹⁰Office of the Secretary of Defense, Special Report: *The Bottom Up Review: Forces for a New Era*, September 1993, 1-21.

¹¹United States Central Command (CENTCOM), *1995 Posture Statement*, January 1996, 22-23.

¹²Patrick Clawson, *Iran's Strategic Intentions and Capabilities* (Washington, DC: Institute for National Strategic Studies, 1994): 69.

¹³Ibid.

¹⁴Department of Defense, *Dictionary of Military and Associated Terms: As Amended by JMTGM-094-95* (Washington, DC: Government Printing Office, 1994): 83, 280, 281.

¹⁵Clawson, 65.

¹⁶"Special Report Number 6: Iran's Weapon's of Mass Destruction." *Jane's Intelligence Review* (November 1995): 1-35

¹⁷1995 *Posture Statement*, 23.

¹⁸Weapons of mass destruction (WMD) are defined in this context as nuclear (with or without a nuclear yield), chemical, and biological.

¹⁹"Persian Gulf Instability Will Not Benefit Any Littoral State, Says President," *Iran News*, in English, 20 December 1994, 1.

²⁰"Iran-Oman Military Cooperation Guarantees Persian Gulf Security," *INRA News*, in English, 8 October 1996, .1; *Iran News*, 20 December 1994, 1.

²¹*Ibid.*; and *Iran News*, in English, 20 December 1994, 1.

²²*Ibid.*

²³Department of the Navy, *Forward From the Sea*, National Maritime Strategy Paper Washington, DC: 1995.

²⁴Of note the term maritime strategy is often used interchangeably with sea power. However, for purposes of clarity the term sea power will be used in the context of this thesis. Maritime power will be defined in this thesis as the state's ability to use the SLOC to carry out the collective commercial functions necessary to sea borne trade. A state's commercially or government owned, operated, and sometimes flagged merchant vessels are the prime functionaries of its maritime power. Naval power is defined in this study as naval weapons and their tactical function. Naval weapons include surface, submarine, air, and amphibious forces that operate in the marine environment. The encompassing term sea power is thus defined as the application of naval and maritime power on the high seas.

²⁵*INRA News*, in English, 8 October 1996, 1; *Iran News*, 20 December 1994, 1.

²⁶George Lenczowski, *Iran Under the Pahlavis*, (Stanford CA: Hoover Institute Press, 1978): 423.

²⁷Silverberg and Tusa, "Shadow over the Gulf: Iran is preparing - but for what?" *Armed Forces Journal*, (August 1995): 24-30.

²⁸Alon Ben-Meir "The Dual Containment Strategy Is No Longer Viable," *Middle East Policy* IV, no. 3 (March 1996): 58-71.

²⁹Silverberg and Tusa, 24.

CHAPTER 2

HISTORICAL BACKGROUND OF IRANIAN SEA POWER STRATEGY

Reza Shah's Reign

The examination of prerevolutionary Iranian history under the rule of the Pahlavi dynasty is critical to understanding the forces that shape modern Iran's perceptions, military force structure, and strategic policy. The purpose of this chapter is to present a historic overview of Iran's security strategy and its development through the Pahlavi dynasty up to the Iranian Revolution of 1979. It focuses on the development of Iran's force structure, Mohammed Reza Shah's relationships with the US, and Iran's role within the Central Treaty Organization (CENTO).

The major events of prerevolutionary Iranian history shape Iran's present sea power strategy. Because of Iran's strategic position, the struggles surrounding pre-World War II colonial, and post World War II Cold War, superpower rivalries inextricably link events in Iranian history to global political currents. This connection between modern Iranian history and global political forces has particular relevance to understanding two main forces that shape Iranian perceptions and its national military strategy (NMS) focus on sea power: Iran's bilateral relationship with the US and its vital national interests.

During the late nineteenth and early twentieth centuries, Iran, ostensibly ruled by the feeble Qajar dynasty, came under increasing pressure from Russia in the north, and from Britain pushing westward from India and northward from the Persian Gulf. The Anglo-Russian Entente

of 1907 divided the country into a Russian zone of influence, a British zone, and a neutral zone. In 1908, Western geologists discovered petroleum in western Iran and the resultant flood of Western oil syndicates rapidly overwhelmed the Qajar dynasty's already deteriorating sovereignty. Unable to arrest widening foreign influence, and militarily impotent, Iran's imperial government continued to weaken, and within a few years the country slid into a state of anarchy.¹

After another ten years of degenerating socioeconomic conditions under the Qajar's chaotic central government, circumstances were ripe in Iran for the overthrow of the dynasty. In 1921, Reza Khan Pahlavi (Reza Shah), an ambitious army officer in the government's Russian-styled Cossack Brigade, seized control. With British assistance and the support of the Majlis (Iran's parliament), Reza Khan consolidated his power and declared himself Shah (King) on 13 December 1925. This event was followed by a dramatic and colorful coronation ceremony on 25 April 1926 at Golestan Palace in Tehran: Reza Shah placed the crown on his head, and in a series of pronouncements confirmed his son, Mohammed Reza, as Crown Prince, and thus formally inaugurated the Pahlavi dynasty of Iran.²

Inspired by the achievements of Kemal Ataturk's Turkish reformation, Reza Shah was an extreme secular nationalist. He sought every opportunity to increase Iran's prestige both abroad and internally, and to this end launched a massive modernization program. In August 1928 the Shah directed renegotiation of the Anglo-Persian Oil Company's (APOC) monopoly petroleum concession to terms more favorable to Iran. Although successful in the short term, within a year both worldwide oil demand and prices plummeted. By mid-1930 the Great Depression caught Iran in the midst of a modernization program dependent on steady oil revenues. The treasury's foreign cash reserves declined precipitously, creating a financial crisis.³

Quick to take advantage of Iran's precarious financial position in the fall of 1930, Iraq's new government, operating under Britain's protection, intensified its ongoing adventures in the northern Gulf. Iraq deployed troops and artillery to the already contentious Shatt al-Arab waterway threatening Iranian shipping and Iran's critical oil facilities at Abadan. Iraq also intensified its ongoing clandestine effort to expand its influence in the Iranian Kurdistan region. Anxious to counter this challenge to his new regime, the Shah launched a plan to affirm Iran's perceived historic dominance in the Gulf. This scheme included an aggressive diplomatic campaign and a reassertion of Iran's long-standing claims to Bahrain. More significantly, this plan included the establishment of a navy. The Shah intended to use Iranian naval forces in the Gulf both to maintain Iranian sovereignty and to demonstrate Iran's commitment to protecting its interests in the Gulf.⁴

As a first step, the Iranian government signed contracts with Italy for the construction of six destroyer-sized warships. However, as the depression deepened and global oil demands dropped, Iran's cash ran increasingly short, and the Shah scaled back these orders to four small but heavily armed gunboats, which were finally delivered in early 1932. Their arrival marked the birth of Iran's first modern Navy, and, by the end of the same year, Imperial Iran had nearly 1,000 sailors in uniform.⁵

Although Reza Shah sought to strengthen the Army before his ascent to power, his evolving national military strategy (NMS) eventually centered on two forces: a small (40,000-strong by the late 1930s) professional army primarily for internal stability; and the sea power of a Navy focused on protecting Iran's SCOG and projecting Iranian influence into the Gulf. Reza Shah regularly sent Imperial warships to "show the flag" in the Gulf. Iran's principal naval activities ranged from escort duty in the Shatt al-Arab, to piracy interdiction in the southern Gulf.⁶

Despite financial constraints that would delay the acquisition of a destroyer-sized warship until 1949, Reza Shah regularly sent Navy and Air Force officer trainees to France to begin forming the core leadership of Iran's future sea power capability. Early in his reign, the first Pahlavi Shah clearly set a new strategic direction for modern Iran's engagement in the Gulf region. His goal was to make Iran the dominant state in the region, with his Imperial Navy as its key force.⁷

Iran's new regional vision led to a policy of seeking the friendship of other world powers to counterbalance the predominant influences in the region: Britain and Soviet Russia. This offset, or balance of power strategy, led Reza Shah to establish close economic and cultural relations with Nazi Germany, which offered high-quality military equipment, technicians, industrial advisors and assistance in building the trans-Iran railway. Although Iran was officially neutral during World War II (WWII) and sought to maintain normal economic relations with both sides, the Allies distrusted Reza Shah's pro-German policies. Nevertheless, the Allies selected Iran as a transshipment point for war material to the Soviet Union. To secure the route, after a perfunctory ultimatum for access through Iran and after slight resistance by Iran's small army, the Allies swiftly occupied Iran and divided the country, with the Soviets in the north and Britain in the south. The poor performance of the Shah's small but reasonably well-equipped army against the Allies clearly demonstrated that troops, led by corrupt and unqualified officers, were indifferent to the fate of a political system that offered little more than heavy taxation and brutal repression. The irony of this paradox would continue to haunt the Pahlavi dynasty.⁸

In 1941, pressure by Iran's British and Soviet occupiers forced the abdication of the ostensibly pro-German Reza. His twenty-two-year-old son, Mohammed Reza Pahlavi, succeeded him. At the end of his reign the elder Reza also faced domestic opposition from four major sectors of Iranian society. These groups included the aristocratic politicians, whose

criticism and calls for public debate were suppressed by the government; minority tribes whose leaders the Army imprisoned, and the clergy and the intellectuals who criticized the Shah as a dictator and tool of foreign imperialism. Despite hyperinflation and food shortages during the war years, Iran's Allied occupation ended, virtually overnight, the brutal political repression that had marked Reza Shah's sixteen-year reign. With political prisoners and the press freed, a rigorous debate ensued under a series of new nationalist prime ministers. The new Shah remained secondary in the debate until his brief overthrow and rapid restoration in August 1953.⁹

Reza Shah had recognized that internal stability and Iran's domination of the Persian Gulf were both requisite to the effective protection of Iran's strategic center of gravity (SCOG). The Shah's national military strategy (NMS) translated these security imperatives into the development of a small, but mobile internal defense force designed to enforce order (the Army), and of the Imperial Navy to ensure sea control of the Gulf. By 1941, Iran's Navy, although modest by Western standards, was the largest in the Gulf region. More than 2,000 officers and men manned the Imperial Navy's twenty small warships, dozens of coastal batteries, and harbor defense forces. Iran's fleet was organized into four squadrons, each with at least one frigate. Large naval base improvements had been made in Bandar Abbas and the construction of a new naval base at Khorramshahr was nearing completion.¹⁰

Mohammed Reza Shah

Shortly after the end of the WWII, the new government immediately pressed for restoration of Iran's sovereignty. In a December 1945 appearance before the United Nations Security Council, Iran's Prime Minister Hosain Ala stated, "The integrity of the United Nations is dependent on actions it takes to support Iran's sovereignty." Iran, increasingly isolated by

Soviet forces in the north and surrounded in the Gulf by a disinterested Imperial Britain, urged the US to take up its case. In a 10 December 1945 meeting in Moscow, the US Ambassador to the Soviet Union, Ernest Belvin, initiated discussions with his Soviet counterpart Vyacheslav Molotov, calling for the concurrent withdrawal of British, Soviet, and (very limited) American forces. The Tripartite Foreign Ministers Conference in Moscow formally addressed these issues a few weeks later. Objectives advanced by the US at this meeting included three points: first, strong pressure for immediate withdrawal of United Kingdom (UK) and Soviet forces from Iranian territory; second, interim guarantees for free movement of Iranian troops in occupied areas; and last, the promotion of Iranian sovereignty and independence in granting oil concessions.¹¹

The withdrawal of Soviet troops stalled in early 1946. To complicate this issue, Russia's clandestine overseas security service, the KGB, covertly organized and supported a local communist movement calling for the independence of Iran's northern province of Azerbaijan. The Union of Soviet Socialist Republics (USSR) organized elections and applied overt pressure for international recognition of an independent Azerbaijani government under the veteran communist partisan Ja'far Pishavari. The crisis rapidly spiraled into an international conflict involving both superpowers and Iran's former colonial master, Britain, marking the beginning of the "Cold War."¹²

Facing limited options, Iran's new Prime Minister, Ahmad Qavam, offered the USSR an exclusive oil concession in areas of northern Iran in exchange for a complete Soviet withdrawal from Iranian territory. Spurred by prospects of this lucrative oil agreement, and facing intense US and British pressure, Stalin ordered the departure of Russian troops in late May 1946. Qavam later obtained a separate concession agreement with Pishavari to obviate another Soviet invasion of the area under the pretext of restoring order in northern Iran.¹³

The rising importance of Gulf oil and aggressive Soviet advances to gain dominance over it shaped a new US policy toward Iran. In 1947, with an ever-deepening covert influence in Iran, the USSR demanded that Iran schedule new Majlis elections, where the KGB's "socialist" candidates expected to do well. Although this election never occurred, the Soviets unsuccessfully attempted to use their extensive political foothold in Iran to press for Majlis ratification of the 1946 Iran-USSR oil exploration agreement. An October 1946 memorandum to US Secretary of State, Dean Acheson, from the Director of the State Department's Bureau of Near Eastern and African Affairs, Loy Henderson, captured the growing level of US anxiety concerning Iran. He warned that "Iran will succumb to the Soviet Union" if the US did not provide "immediate security and economic assistance." In a separate memo, the US Joint Chiefs of Staff responded to a series of questions prepared by the State Department requesting an outline of US strategic interests in Iran. The conclusions registered in this late 1946 memo prophetically outlined US policy toward Iran for the next thirty years:

The interests of the United States and its military capabilities would be adversely affected by the loss of Middle East oil occurring through possible Soviet domination of Iran by means other than war. . . .

It is therefore to the strategic interests of the United States to keep Soviet influence and Soviet armed forces removed as far as possible from oil resources in Iran, Iraq and the Near and Middle East. . . .

The Joint Chiefs of Staff consider that token assistance by the United States to the Iranian military establishment would probably contribute to the defense of the United States strategic interests in the Near and Middle East.¹⁴

Washington's initial attempts to counterbalance increasing Soviet overtures in the region were transfers of military hardware to Iran. A number of unspecified vehicles and aircraft were part of this package. However, the most significant items included the replacement of the Iranian Navy's obsolescent gunboats with ships provided from the UK, then eager to reduce the financial burden of its postwar commitments. This consignment, arranged by the US, included

two modern Loch-class frigates, and a series of Algerine-type frigates delivered between mid-1948 and early 1949.¹⁵

By the end of 1949, the Imperial Iranian Navy had grown to over 3,000 sailors manning more than twenty warships, half of them new, and as well equipped as the Royal Navy from which they were transferred. Possibly more indicative of Iran's maturing sea control capability than its new warships was the Iranian Navy's 1949 acquisition of a small naval combat logistics force. Iran also obtained an ability for at-sea refueling with its new Italian-built oiler *Hormuz*, and for voyage repairs with its new English-built MFV-class tender, *Sirri*. No longer tied to naval bases for refueling (normally every three days) or repairs, the Imperial Navy could now steam the entire length of Gulf, and far out into the North Arabian Sea. Iran could also concentrate its naval forces without being compelled to rotate ships back to homeport, and could stay at sea for weeks, possibly months, instead of days.

Of note, in the years 1932-1949, Iran did not invest in the modernization of its meager mine laying capability, nor did Iran attempt to develop a naval special warfare, or combat swimmer ("frogman") program. Moreover, Iran decommissioned most of its obsolescent shallow water gunboats without a replacement platform for this mission, cutting itself off from most of the littoral marsh areas of the northern Gulf. In less than two years, the Iranian Navy had streamlined itself for one mission: deep water sea control of the Gulf region.¹⁶

Within Iran, British and Russian influence waned under intense US pressure, and a spirited debate ensued in the Majlis for greater Iranian sovereignty over its oil interests. By late 1950, Iran's fractured coalition of nationalist parties, titled the National Front, and led by Muhammad Mosaddeq, capitalized on this fervor and won a series of elections that resulted in its takeover of the Majlis, and Mosaddeq's rise to Prime Minister in 1951. The Mosaddeq government, a tenuous combination of radicals, eventually disintegrated. Mosaddeq dismissed

the Majlis and ruled the country by extralegal methods that included rigged national referendums and popular solicitation to the “nation [i.e., the Iranian proletariat] above the law.” A master of crowd appeal, he reached his zenith after nationalizing the Iran’s largest oil concession, the British-owned Anglo-Persian Oil Company. Fearing his own fall, Mohammed Reza Shah attempted to dismiss Mosaddeq in favor of a military junta on 16 August 1953. The regime countered this move with organized street protests and Mosaddeq refused to step down. When it appeared that Mosaddeq had successfully resisted his removal, the Shah and Queen Sorayya fled the country. Two days later a coup deposed the Mosaddeq regime. Arrested within hours of the coup, Mosaddeq was convicted of treason and remained under house arrest until his death in 1967. The coup, covertly initiated by US and British agents under the Central Intelligence Agency’s (CIA) Operation Ajax, linked the US and the Shah in a special intelligence relationship. Moreover, this Iranian event helped define the dominant US image in Middle East among the leaders of rising Arab-nationalist countries, especially Egypt’s Nasser. Many of these leaders would never trust the US.¹⁷

From 1953 until the 1979 Iranian Revolution, Mohammed Reza Shah built a system of personal control that echoed the days of his father. Mohammed Reza replaced independent-minded politicians with political nonentities loyal to the monarchy who carried out the Shah’s instructions without challenging his personal authority. Suppression of dissent and a focus on internal security typified Mohammed Reza’s reign.¹⁸

In the years following Mohammed Reza Shah’s restoration, the Iranian economy recovered under increased oil revenues from a newly negotiated arrangement with Western oil companies. The new agreement gave Iran 50 percent of all profits (raised to 55 percent in 1970). Robust US military and economic aid complemented this financial boon, totaling \$200 million in 1954 alone. This sum included \$25 million in cash, new radar and communication systems,

ships, aircraft, and technical maintenance assistance. With plenty of on-hand capital, the Shah established the infamous Savak, a secret police force designed exclusively to suppress dissent. However, modernization of the Air Force and expansion of the Imperial Navy were the top military priorities. Mohammed Reza was beginning to fulfill his, and his father's, unrealized goal of Gulf sea control to protect Iran's strategic center of gravity (SCOG): oil.¹⁹

This period also marked other Iranian efforts to protect its exposed SCOG, including Iran's takeover of its oil concessions. A key development supporting this goal was the establishment of a close security relationship with the US, aimed at protecting Iran and its vulnerable oil resources along the country's northwestern frontier against a potential Soviet or Iraqi attack. This relationship was the key that the Shah more freedom to shift Iran's emphasis away from its Army. A series of US-sponsored negotiations resulted in an October 1954 agreement that ended the Anglo-Persian oil dispute and gave US oil companies a 40 percent share in Iran's oil production. The Shah capitalized on the US's new oil interests in Iran and began pressuring the new Eisenhower administration for a formal bilateral security relationship.²⁰

The Shah's new diplomatic strategy to obtain more US military support stressed the perceived mutual US-Iranian threats of growing Arab nationalism, the threat to Gulf oil from the Soviet Union, and the linkage of Iran to Gulf stability. Usually successfully, Mohammed Reza consistently used these three themes throughout the last three decades of his reign. A 1950s era telegram from the Shah, transmitted to President Eisenhower on the eve of an important US-USSR summit, highlights at least two of these points (mutual interests and US support in a conflict with Russia):

I hasten to reiterate our gratitude for the amount of [military] assistance already given. But if help is to be effective, it should be dispensed in time and in adequate measure. . . .

The idea is to show Iran is not alone and that her powerful ally is committed to intervene in her behalf whenever she is subjected to any pressure or force.

You will remember, Mr. President, that I have on several occasions stressed the probability of regional hostilities and do so again in apprehension of their possible imminence. Should Iran get involved in such a conflict, even leaving the Soviet Union aside, she may be threatened by countries equipped with five times as many airfield[s] and about the same coefficient of modern and efficient [fighter] models.²¹

By the end of the 1950s, the Shah's diplomatic strategy for more US support to protect Iran's SCOG was working. The aid relationship between US and Iran normalized, resulting in the transfer over \$1.2 billion in the years between 1953 and 1959. In addition to cash and weapons, the US sponsored political initiatives designed to satisfy the Shah's expanding calls for more US support. These efforts notably included the establishment of the US-backed Baghdad Pact (later to evolve as the Central Treaty Organization--CENTO), and a separate US-Iran bilateral security agreement in early 1959.²²

Nevertheless, Iran's relationship with the US was not one sided. Iran's accession to the Baghdad Pact, previously signed by Iraq and Turkey, gave the US a completed chain of "allied" Middle Eastern states along the Northern Tier and served as a major link between the North Atlantic Treaty Organization (NATO) and the South East Asian Treaty Organization (SEATO). Furthermore, with CENTO and bilateral treaties in place, the US used Iran to protecting its interests in the Gulf. The US was well aware of the Shah's hegemonic ambitions in the Gulf and gave its tacit support. In a special report to the President, dated 15 November 1958, the Executive Secretary to the National Security Council outlined Mohammed Reza's geopolitical ambitions in the Gulf, and alluded to Iran's strategic imperative of protecting its SCOG:

Although not directly involved in intra-Arab rivalries or Arab-Israeli hostilities, Iran is deeply disturbed by pan-Arabism, both as a direct threat to its security and as a possible barrier to Iranian aspirations in the Persian Gulf area. Iran claims Bahrain and considers itself the logical heir to present British influence in the area. Iran is currently engaged in a campaign to woo the Persian Gulf Sheikhs, most of whom enjoy a special treaty relationship with the United Kingdom. A potential conflict with Iraq looms over the use of the Shatt-el-Arab, a water artery leading to Iran's principal Persian Gulf ports [and the majority of Iran's oil].²³

By 1960, Iran's relationship with Russia had thawed as the Soviet propaganda machine lessened its hard line rhetoric against the West and its client states. This gave Mohammed Reza Shah more room for diplomatic maneuver in the Gulf. In response, the Shah appeased the USSR on 15 September 1962 with an official promise that Iran would not permit foreign (meaning US) nuclear missiles on its territory. The Shah knew that Iran was not a target for the deployment for US land-based nuclear missiles, and also was aware that the US Navy's deployment of ballistic missile submarines to the Mediterranean the previous year had made America's contentious Jupiter nuclear-armed missile system obsolete overnight.²⁴ His promise was not hard to keep.

Although oil revenues were up and US economic aid poured in, the overwhelming majority of the Iranian people remained desperately poor. Political unrest grew in response to this condition. As a result of the Shah's failure to take needed social, economic, and political reforms, the Kennedy administration established a special interagency task force to review US policy toward Iran. The task force recommended increasing aid but linking it to internal reforms. In January 1963 the Shah, pressured by the US and at home by domestic opposition, began a series of wide-ranging social reforms and modernization called the "White Revolution." The Shah's ambitious reforms (including land reform, emancipation of women, and rapid industrialization) were too much for some (especially the clergy) and not enough for others; they were accompanied by corruption and widespread social dislocation.

Political unrest gradually subsided in Iran because of the White Revolution's modest successes and vigorous government repression of dissent, although a series of huge demonstrations occurred in June 1963, organized by the then obscure clergyman Ayatollah Ruhollah Khomeini. By mid-1964 Iran's economic situation began to improve and US and Iranian officials mutually agreed to scale back economic aid. Nevertheless, the two countries

remained very close. As Iranian cash flow improved from steadily increasing oil revenues and modernization, extensive US military sales to Iran replaced economic aid as the key bilateral issue. As a result, the US became increasingly dependent on Iranian security cooperation to advance American aims in the Gulf. As the US-Iranian relationship grew more evenhanded, US officials found it gradually more difficult to exert influence over the Shah. 25

The Gulf and Iran--Strategic Context of the 1960s: Mohammed Reza Shah's View

The White Revolution assured stability for the Shah at home. This was a vital prerequisite for Iran to have an effective military position to support advancement of its principal regional security interest--the protection of its oil exports. Iran's earlier advances for Iranian Gulf hegemony had certainly reduced the risks to Iran's SGOG. However, the early 1960s brought significant changes to the Gulf's strategic balance, and Iran, now in a more isolated position, realized that its very survival depended on its preeminence in the Gulf. Mohammed Reza concluded that Iran was absolutely compelled to become the dominant power in the Gulf in order to safeguard its vital interest.

This perception stemmed from two main sources. First, Egypt's attempt to export pan-Arabism to the Gulf directly threatened Iran's interests. Second, CENTO had lost its value to the US and therefore, unless the USSR was involved, American military support could not be counted on to help save Iran in a regional Gulf conflict with Arab states. The sharpening pan-Arabism emanating from Nasser's Egypt had led to dissolution of diplomatic relations between the two countries four years earlier in 1960 (ostensibly over Iran's close ties with Israel). More importantly, the Shah saw in the Egyptian president's prestige, and his ability to inspire the masses, a significant incitement to the antimonarchial threat represented by the radical doctrines of Arab nationalism and Arab socialism. The scale of Egyptian military activity in Yemen,

together with the possibility of a British withdrawal from Aden, raised the specter of Egyptian forces lodged on the Arabian Peninsula, where subversion, first directed at precarious Oman, and then at other Gulf Arab states, would eventually threaten Iran's oil flow. Evidence had mounted, at least in the Shah's mind, that Arab nationalism was a pandemic threat to the stability of the entire Middle East, and that Iran was forced to increase its power in the Gulf to safeguard its SCOG.²⁶

In addition to the threat posed by Arab nationalism, the Shah felt CENTO's lack of significance for the US--except in relation to the Soviets--compelled Iran to a "go it alone" strategy if its interests were to be protected. Although providing a measure of protection against the Soviet threat, the Shah's faith in the CENTO treaty evaporated when the CENTO powers failed to help Pakistan during its war with India in 1965. During the conflict, the US prohibited Iran from offering US-made weapons to Pakistan.²⁷ The Shah's doubts about the seriousness of the US's commitment to Iran's interests in the Gulf deepened even further following the speedy American recognition of an Arab nationalist regime in Yemen following that country's antimonarchical coup (which was supported by Egyptian forces). It was obvious, in Iran's judgment, that détente, rather than regional conflicts, permeated superpower relations. Moreover, Iran's perception of a fading Soviet threat gave Iran a new opportunity: the freedom to shift its scarce resources from protecting its northern frontier to protecting its primary interest, its SCOG.

The Enlargement of Iran's Sea Control Strategy

Iran's apprehension of regional isolation and relative military impotence in the face of local disputes worsened when its growing oil interests, the key to Iranian internal stability, became increasingly vulnerable. The rapid development of Iranian offshore oil fields and the

construction of the huge oil-exporting terminal on Kharg Island in the northern Gulf exposed Iran's principal economic artery. In April 1964 a massive joint US-Iranian Gulf naval exercise highlighted Iran's precarious Gulf position.²⁸ This event, dubbed Operation Delaware, concentrated on the defense of Iran's coastal oil facilities. Although augmented by US Navy destroyers and US Army ground forces, Iran's slow command and control structure (C2) and untested Navy performed poorly against a small assault force backed up by naval gunfire. Routed within a few hours, the Iranian Navy and Air Force failed to defend any of Iran's vital areas, including the Kharg Island oil terminal, Bandar Abbas and Bushehr Naval Bases, and the Straits of Hormuz. Opposition forces, composed of US Navy surface action group backed by land-based strike aircraft, were never effectively engaged by Iranian Navy warships and Air Force fighters. Personally engaged in the exercise, the Shah's candid insights--including his personal observation that the exercise underscored Iran's need for both land-based maritime patrol and overwater strike-fighter aircraft--perforated the Iranian military's overly positive postexercise reports and caused him to rethink Iranian military power projection capability and sea control of the Gulf. In the years after 1964, the Shah constantly pressed the US for new warships, updated aircraft, and more advisors to protect the new Iranian Gulf oil facilities.²⁹

Although the majority of Iran's resources were already dedicated to its SCOG interests, it was against this backdrop that the Shah officially declared, in March 1965, that Iran's military would henceforth focus on the Gulf. Within six months the Majlis passed a new bill authorizing \$400 million in improvements for the Iranian Navy and Air Force. US contractors filled the overwhelming majority of Iran's new arms orders. After initial pilot training in early 1966, Northrop Corporation delivered the first three F-5 fighter-bomber squadrons out of a total ninety jet purchase. Within eighteen months, this contract alone tripled the size of Iran's tactical air force, then composed of fifty aging F-84Gs, F-86Fs, and a few F-104s. Lacking a cadre of

skilled aircraft technicians, the Iranian Air Force's maintenance infrastructure became quickly overloaded. Concerned with this problem, the US stalled the Shah's request for sale of the US Air Force F-4 Phantom fighter bomber for another year. Iran finally took delivery of its first shipment of thirty F-4s in late 1967.³⁰

A qualified jet fighter pilot himself, the Shah was also painfully aware of Iran's lack of an integrated air defense system. An integrated air defense system (IADS) is a layered air defense system that links and deconflicts the operations of long-range early-warning radar (EW), surface-to-air missiles (SAM), and fighter aircraft guided to their targets by ground intercept controllers (GCI). As with other programs, the Shah was the chief architect in pressuring the US for assistance in development of an IADS. His concept included an elaborate series of data-linked, Westinghouse TPS-72 EW radars; the Century Airborne Warning and Control System (AWACS), the predecessor to US Air Force's modern E-3A AWACS; and, the US Army's potent Hawk SAM system. By 1965 the US completed new EW/GCI sites in Bushehr, Kharg Island, and Bandar Abbas.³¹

Iran's Imperial Navy grew even faster. In less than three years after the Shah's 1965 announcement, Iran's Navy grew from a collection of 20 ships and slightly less than 3,000 personnel to over 6,000 sailors manning nearly forty new destroyers, corvettes, and maritime patrol aircraft. Although Iran's previous naval force, the largest of the Gulf states, had the capability for local sea control (e.g., the Straits of Hormuz), the modernized Imperial Iranian Navy was designed for sea control of the entire Gulf and its approaches. Reorganized for better C2, the Navy divided itself into two naval districts: the First Naval District based in Bushehr, which encompassed new warship berthing and repair facilities built by the US; and the Second Naval District in Bandar Abbas. The Imperial Iranian Naval Headquarters remained in Tehran but set up a new tactical command center in Bandar Abbas to control all Gulf naval operations.

Colocated with the Iranian Air Force's Bandar Abbas Sector Operations center, the two command centers shared air and sea target tracking data.³²

In January 1968, facing a shrinking domestic economy and burdened by the spiraling costs of forward military presence, Britain decided to withdraw its forces from east of the Suez before the end of 1971. This announcement exacerbated the Shah's previous apprehensions of a power vacuum in the Gulf region, but also provided him an opportunity. Fearing a resurgence of the numerous territorial disputes and claims among the littoral states of the Gulf once the restraining force of Britain had retracted, the Shah accelerated arms purchases.

Although appreciative of US military assistance and extremely supportive of the American naval presence in the Indian Ocean, the Shah continued to perceive the US as an unreliable partner throughout the latter half of the 1960s. Mohammed Reza's earlier fears regarding the lack of US commitment to CENTO were amplified by increasing superpower rapprochement, and the apparent wavering US engagement in Southeast Asia with the onset of the Johnson administration's "Vietnamization" program. Convinced that US interests in the Gulf were limited strictly to oil, the Shah continued to see that in most Gulf conflict contingencies, Iran would have to fend for itself.

The Shah's intent, to provide Iran with a modern and sophisticated military force to support its interests without US help was clearly enunciated in a May 1968 commencement speech made at the Iranian Command and Staff College:

Our independent national policy has enabled us to have very good relations with all countries except one [Iraq]. . . . Our program for the buildup of the Imperial Armed Forces will, in five years, turn Iran into a regional pillar of stability, peace, and progress.³³

The Shah was increasingly determined to deny outside powers an influential role in the Gulf after Britain's departure. The 1967 Arab-Israeli War had resulted in a resounding Arab defeat, and Egypt had withdrawn its forces from Yemen in 1968. Although Iran was less fearful

of Nasser's ability to foment troubles in the Gulf, the Shah still regarded Arab nationalism as Iran's primary threat and felt further compelled to expand his influence over the emerging states on the Arabian Peninsula (Bahrain, Qatar, UAE and Kuwait).

By late 1968 the Shah's new sea power strategy of sea control began to take shape. To protect its SCOG--Gulf oil facilities and shipping, Iran's plan was simple. The Shah's naval and maritime air-strike forces (by this time larger than Britain's presence in the Gulf), protected by a potent integrated air defense (IADS) umbrella, would control the seas. Furthermore, in a hypothetical conflict, once sea control of the Gulf was achieved, Iran could concentrate on projecting power ashore. A massive IADS and ground attack fighter-bombers would then shield the Iranian mainland from any retaliation. The Iranian Army, historically structured and employed to quell internal disturbances, would deploy to the Iraqi border during contingencies.

An incident between Iran and Iraq over the Shatt al-Arab waterway represented an early application of the Shah's new sea power strategy. The Shah, fearful of Iraq after the radical Arab nationalist General Kassem's 1958 overthrow of the country's pro-Western Hashemite ruler, wanted to redefine the Shatt al-Arab portion of the Iran-Iraq border. Under the 1937 Iran-Iraq border definition treaty, Iraq had legal sovereignty over the entire volume of the waterway and consequently controlled the only seaward access to the immense Abadan oil refinery, Iran's second largest after Kharg Island. In April 1969, Iran decided to defy the 1937 treaty to leverage a renegotiation of its terms. The Shah ordered Iranian-flagged merchant vessels, backed by heavy Iranian Navy surface combatants and Air Force fighters, through the waterway violating Iraq's territory. Although this incident, which lasted several weeks, led to an escalation of border incidents, in the end, armed confrontation was avoided. Iraq was unable to compete with the Shah's Navy and Air Force. The Shah's new sea power strategy of sea control was beginning to

work and, in the case of the Shatt al-Arab, would eventually result in an agreed waterway border that was more favorable to Iran.³⁴

In November 1970, Iran's Navy and Air Forces tested their spreading sea control capability in a major exercise centered on the Iran's southern Gulf island of Beni Farur.³⁵ This joint maneuver included surface ship engagements, overwater maritime air strikes on opposition naval forces, and close air support by the Imperial Air Force. Culminating in a large amphibious landing, this exercise also included an extremely complex test of Iran's new sea control tool of power projection ashore. At last, this exercise clearly demonstrated that the Shah's emerging sea control strategy of powerful new weapons (warships and fighter aircraft from the US), improved C2 capabilities in the Gulf, and realistic training, had begun to bear fruit. Iran was positioning itself to exert undisputed leadership in the Gulf after Britain's withdrawal. A declassified CIA report titled "The Shah's Increasing Assurance," summarized this image: "[the Shah's] aspirations have been stimulated by his confidence that no country in the Persian Gulf can match Iran's power."³⁶

Following President Nixon's first inauguration, the character of US-Iranian relations changed dramatically. The new administration officially recognized Iran's growing power in the Gulf as the primary medium for American leverage in the region, and actively encouraged Iran to play a much greater role in regional affairs. More significantly, under the new "Nixon doctrine," which relied on Iran as a proxy for Western interests after Britain's withdrawal, internal Iranian reforms no longer determined the delivery of US aid and weapons. The Shah convincingly argued that Iran's responsibilities as the "keeper" of Western security interests in the Gulf required large amounts of new weaponry. The US government agreed and, during a May 1972 state visit to Tehran, President Nixon promised the Shah he could buy anything he wanted from the US except nuclear weapons. As a result, Iran began to cooperate with the US's

most controversial ally in the region, Israel. Iran would later provide the only Organization of Petroleum Exporting Countries (OPEC) cartel oil Israel received during the 1973 Arab oil embargo. Iran also cooperated with the Israeli Air Force on joint production of US-designed aircraft munitions.³⁷

The first clear manifestation of the Gulf's post-Anglo security system occurred in early 1971 with the Shah's renunciation of Iran's claim to Bahrain, long considered by Iran as the country's fourteenth province. Simultaneous with this announcement, the Shah vigorously reasserted Iran's claims to the Tunbs and Abu Musa islands. These small islands, strategically located in the southern Gulf's northern entrance to the Straits of Hormuz, had a population of only 500. Bahrain, conversely, had more than 500,000 people and significantly more geopolitical capital than the Tunbs and Abu Musa. With tacit British approval, provided as a compensation for dropping claims to Bahrain, Iran occupied the small islands with military forces on 30 November 1971. Of foremost importance, the Shah, with Britain's collusion, ordered the assault one day before the expiration of the treaties that gave Britain control of the external relations of the Gulf sheikdoms, giving a clear signal of Iran's ascendancy as the Gulf's new regional hegemon.³⁸

With the presence of Iranian forces now a *fait accompli*, Sharjah (a Sheikdom now part of the UAE) signed an agreement to station Iranian forces on Abu Musa Island for defensive purposes. The main framework of this agreement stipulated that "one half of the oil revenues from the island and its continental shelf should be allocated, under special arrangements, for the welfare of the people of Sharjah." Sharjah also maintained fishing rights over the island.³⁹

With respect to the two Tunb islands, Iran was unable to reach a similar agreement for legitimacy with the less appealing Sheikdom of Ras al-Khaymah (also now part of the UAE). When asked shortly after the invasion about the legality of Iran's seizure of the Tunbs, the Shah

endeavored to illustrate the finality of the occupation, "They [the Tunbs] are of strategic importance to us as much as to the Persian Gulf states and to the peace and stability of the region. . . . Their geographic position makes them of tremendous military value."⁴⁰

With these successes, the Shah started to think in terms of projecting Iran's sea control capability beyond the SOH to encompass the region of the Gulf of Oman and the wider reaches of the northern Indian Ocean. These areas were viewed as an extension of Iran's oil lifeline through the Gulf. In 1971, Iran concluded bilateral naval defense and exercise agreements with Oman's new ruler, Sultan Qaboos, who had overthrown his father the previous year, and conducted new exercises with CENTO partner Pakistan. This broader security horizon required colossal expansion and modernization of Iran's modest but potent Navy and Air Force. At a 1974 ceremony marking the forty-second anniversary of the founding of the Imperial Iranian Navy (the Navy and Air Force were both formed in 1932, although the Iranian Air Force was an organized branch of the Army until 1955), the Shah stated: "in building up a modern navy our aim has not been confined to leadership in the Persian Gulf of Iran's territorial waters because in the world today Iran enjoys a position which gives its duties regional dimensions." For the Shah and his successor, the Islamic Republic, the stability of Iran's SCOG depended on its sea power domination of the Gulf and the security of the approaches to the Gulf, including the Indian Ocean.⁴¹

To further his sea power ambitions in the Indian Ocean, the Shah ordered the acceleration of ongoing naval base construction at Char Bahar and Jask, both located outside the Straits of Hormuz. To enhance its maritime power, Iran also acquired port facilities on Mauritius, a central Indian Ocean island located 500 miles east of Madagascar and more than 1,000 miles from the Gulf.⁴²

Mohammed Reza's concerns in the Indian Ocean also included his CENTO ally Pakistan. Iran viewed the separatist movement in Iranian Baluchistan as closely linked to the strategic problem of Pakistani internal security. Insurrection in the Pakistani portion of Baluchistan had the potential to spread to Iran. A hostile regime on the northern shore of the Gulf's approaches could then easily thwart Iran's efforts to protect the southern Gulf's sea lines of communication. This determinant induced the Shah to announce in 1972 that Iran would consider an attack on Pakistan as an attack on Iran itself. Iran was now irrevocably committed to the territorial integrity of Pakistan.⁴³

By 1974, Iran and Pakistan further cemented their relationship with a series of semiannual CENTO military exercises. Although these events included some elements of all three services from both countries, training focused on naval and air forces. The CENTO exercises in 1974 (MIDLINK and NEJAT) almost disintegrated, even though heavily scripted, because of poor communications and mediocre target coordination. Significantly improved to address these issues, the following year's exercises, SHAHBAZ-75 and HISHAN-75, brought more challenging scenarios and included several days worth of static communications training to resolve technical C2 problems in advance. Exercises began to incorporate US naval forces in early 1976 (ARESH-76) and culminated in the large and complex SAHAND series of naval exercises. This elaborate annual event included surface, submarine, and maritime air warfare training and culminated in a war-at-sea air strike on the simulated opposition forces.⁴⁴

Further Iranian fears in the Indian Ocean region arose from Oman's endemic political instability and the nearing possibility of a *coup d'état* by radical forces. Given the strategic importance of Oman's Cape Musandam, which forms the southern entrance to Hormuz, materialization of this prospect would clearly threaten the southern leg of Iran's tanker lifeline. The Shah publicly stated that an Omani communist takeover, or any other form of rule hostile to

Iran, was intolerable. In 1973 the Shah offered support in response to Oman's Dhofar Rebellion.⁴⁵ Sensing the spreading rebel threat to his regime and rapid attrition of government soldiers, Sultan Qaboos requested Iranian military support. The Shah responded promptly with troops and helicopters. These forces, along with Jordanian close air support, effectively augmented the Sultan's small army and set the conditions for the eventual military defeat of Oman's communist insurgency.⁴⁶

The decade after 1964 marked the enlargement and materialization of Iran's sea power strategy of sea control in the Gulf region. Declining superpower influence left a power vacuum in the region that Iran had to fill in order to protect its SCOG. With virtually unlimited access to US weapons under the "Nixon doctrine," and blessed with burgeoning coffers of steadily increasing oil revenues, the Shah expanded his sea control strategy to protect Iran's interests by reaching out geopolitically (e.g., support of Oman and Pakistan) and militarily (e.g., occupation of the Tunbs and establishment of Indian Ocean naval bases). Iran's primary SCOG sentry, the Shah's sea control strategy, centered on four components: a large sea-control Navy capable of dominating the Gulf region (including the capability of power projection ashore); a maritime strike Air Force with the capacity to defend the Navy and strike enemy ships; a massive IADS to protect the country from retaliation; and a reasonably well-equipped Army capable of posing a credible deterrent (primarily to Iraq) and assuring internal stability.

Iranian Sea Power--The Mother of All Buildups

By late 1976 the development of Iran's military capabilities entered a new phase of massive buildup. The availability of external military and economic assistance and the extent of Iran's financial resources had historically limited Iran's ambitions. The 1973 Arab oil embargo provided Iran with a remedy to these problems. At the end of the crisis, the international price of

crude oil, which provided 90 percent of Iran's foreign earnings, rose from less than two US dollars to more than eleven dollars per barrel. Boosting this financial windfall was the Shah's refusal to participate in the Arab state's embargo. Iran continued to provide oil to the West and Israel. Four years earlier, Richard Nixon's "blank check" agreement of May 1972 had given the Shah potential access to virtually any type of conventional weaponry in the US arsenal.⁴⁷ Iran's new oil revenues would make that potential into a reality.

Given the catalysts of the Shah's fervent personal commitment to building his military, Iran's new financial means, and Nixon's "free" admission into the American defense infrastructure, Iran was well on its way to Gulf hegemony. However, there were two additional factors that added to the urgency of his purchases. First was the historic vulnerability of Iran's SCOG. The Shah wanted modern armaments from the US immediately, rather than in an uncertain future. Second, Iran wished to pay for its weapons sooner because of the persistent worldwide inflationary pressures of the mid- and late-1970s. To wit, Iran planned to buy more weapons than it needed.

The Imperial Iranian Air Force (IIAF), the most modern of the Shah's armed services, tripled in size in the six years from 1973 to 1979 and planned to expand to over 147,000 airmen by 1982. The Air Force manned over 500 of the most sophisticated US-built fighters, including F-14s, F-4s and F-5s. In the two years prior to the Islamic Revolution, the number of operational fighter squadrons grew from twenty to thirty-two. To support the IIAF's swelling numbers, Iran initiated a massive training program. In the late 1970s, over 1,000 Iranian student in pilots (including the Shah's son) were training in the US with annual costs beyond \$100 million.⁴⁸

Besides modern fighters and trained pilots, the Shah wanted to extend Iran's airpower reach over the Gulf. To support this end, Iran bought aerial tankers, built distant bases, acquired precision-guided munitions, and accelerated the implementation of the SEEK SENTRY

integrated air defense system. By 1978, the IIAF's tanker fleet had more than twenty large aircraft and, in the case of the IIAF's KC747, could pass more fuel per tanking fighter plane than the US Air Force. As part of the PEACE ROLL III sales package, Iran received the world's longest range air-to-air missile, the AIM-54 Phoenix. Linked with the F-14's sophisticated AWG-9 integrated fire control system, the \$1 million per copy Phoenix enabled the F-14 to act as its own EW/GCI radar station. Iran received more than 150 AIM-54 missiles by late 1977. With this weapon the IIAF could shoot down enemy fighters beyond forty miles. For surface ship and vehicle attacks Iran bought more than 2500 Maverick missiles. An exceptional weapon carried on the F-4, Maverick strikes would later make up the overwhelming majority of ship attacks during the Iran-Iraq War.⁴⁹

To provide a longer reach into the Gulf and Indian Ocean, Iran expanded its air bases. The IIAF lengthened runways and improved support facilities inside the Gulf at Abadan, Bushehr, and Bandar Abbas, and in 1976 started new air base construction at Chah Bahar and Jask outside the Gulf.⁵⁰

Iran also obtained US commitments for delivery of 280-300 new F-16 fighters by 1985 to replace Iran's F-4s and F-5s, expected to be retired in the early 1990s. Iran's Deputy Defense Minister, General Toufanian, completed the groundwork for acquisition of the latest American-built fighter, the F-15C Eagle, and opened discussions with the US Navy for joint US-Iranian development of the new F-18 strike fighter, a program then only in the design stage. Iran had letters of intent for acquisition of the US built E-3A AWACS, still the world's leading early-warning radar surveillance plane.⁵¹

The Shah's strategic vision for his 1990 Air Force encompassed four main tasks: first, was deterrence of an Iraqi attack on Iran's vulnerable oil facilities in the northern Gulf; second, if attacked, to decisively defend Iran against threats from any direction along the country's

4,000-mile border. The last two tasks were the most significant: to project offensive air power in the Gulf region, and to provide an air defense for the Imperial Iranian Navy.⁵²

Of key significance in Iran-Iraq conflict scenarios was the Shah's airpower strategy. Given the relative inferiority of Iran's smaller Army (designed for strategic deterrence and internal stability) compared to Iraq's larger ground forces, early establishment of IIAF air superiority was crucial to Iran. Compounding this dilemma was the fact that Iran's most potent force, its Navy, would be unable to make a significant contribution to any Iran-Iraq ground war. Most Iraqi oil (its SCOG) was transported through pipelines to the Mediterranean, and was therefore invulnerable to sea interdiction. Moreover, despite the fact that Iranian Navy had the Gulf's largest amphibious force, it was composed of one modest battalion landing team (800 marines), and was only intended for small operations, such as island reinforcement. The IIN's troop carriers, 14 hovercraft and two small landing ships, were capable of landing no more than a few thousand troops. Given Iraq's small Gulf coastline of swamps and marsh, strategic surprise and inland mobility were impracticable.⁵³

In an Iran-Iraq ground war, the Shah projected that the Iranian Army would probably be unable to defend the oil-rich province of Kuzestan on the Iraqi border, unless the IIAF was able to defeat the Iraqi Air Force quickly and provide significant early support to Iranian ground forces. Once the IIAF achieved air superiority, Iran intended to use its precision-guided munitions, greater payloads, and longer range to strike targets deep inside Iraq. (Ironically, this tenuous architecture quickly unraveled at the onset of the Iran-Iraq War, due primarily to Iran's unfinished SEEKSENTRY IADS and lack of an early warning AWACS. The Iraqi Air Force had relatively free access to strike Iran's key oil facilities and oil tankers during the entire war, and it was the Iranian ground forces that rallied successfully to stop, and then reverse, Iraq's initial gains.)⁵⁴

Although never operationally finished, the IIAF's tactical counter-air (destroying enemy fighter planes) doctrine for its newest aircraft was sound. It called for two F-16s to provide protective escort for each F-14. The F-14's role was to detect and destroy enemy fighter penetrations at maximum range with the Phoenix missile, while F-16s, working with the AWACS, operated primarily within Iranian airspace for counter-air operations. F-14s would provide the air defense coverage for both Iranian surface ships as well as F-4s and F-16s on ship attack and deep interdiction missions. Iranian airpower doctrine partially paralleled both US Air Force and Navy airpower employment principles of the time. Nevertheless, Iranian air power doctrine, with its AWACS, was designed principally to support Iran's sea control of the Gulf region.⁵⁵

Mohammed Reza's Naval Buildup

In Iran, the Shah's sea control forces had top priority for resources; therefore, hence the Imperial Iranian Navy (IIN)'s buildup paralleled that of Iran's Air Force. Navy personnel strength rose from 16,000 to 28,000 in the last three years of the Shah's reign. The IIN had projected this number to swell even further for a total of 42,000 sailors by 1983. Moreover, with the exception of the IIAF's flying officer candidates, the Navy received Iran's best recruits. In terms of financial resources, the IIN's total share of arms purchases in the five years before 1979 dwarfed Iran's other services, exceeding \$4.2 billion, versus the IIAF's \$3.04 billion and Army's \$2.7 billion. This fact alone clearly demonstrates Iran's priorities for its sea control forces (the Navy and Air Force).⁵⁶

By the late 1970s, the IIN's reach extended beyond the Gulf and the Arabian Sea into the Indian Ocean.⁵⁷ Iran's major surface ships (acquired in the in the late 1960s), the Battle-class destroyer *Artemiz* (ex-HMS *Shyls*) and four MK 5 missile-armed frigates from Vosper

Thornycroft UK were modernized in 1973 with upgraded combat systems (faster fire control sensors and computers) for more accurate weapons direction. Shortly after these upgrades, Iran purchased two modified Fram II-class destroyers from the US.⁵⁸ Commissioned *Babr* and *Palang*, the targeting capability of these ships was improved in 1974 with the installation of a Canadian telescopic hanger system for an embarked patrol helicopter, the US Navy's Standard (SM-1) medium-range air defense missile system, and an advanced technology variable depth towed active sonar.

In the same year Iran also ordered twelve Combattante-II-class fast attack craft from the French firm, Constructions Mecaniques de Normandie. Armed with a single Otto Melara 76mm gun, these ships later added four anti-ship cruise missiles. The IIN procured large numbers of small coastal patrol craft for amphibious assault, logistics and protection of Iran's inland waters, including six Wellington-type (BH-7) and eight Winchester-type (SR-6) hovercraft. At the time Iran had the world's largest hovercraft force.⁵⁹

By the mid-1970s most of Iran's improved warships, now numbering more than forty, had more advanced systems than their US and Royal Navy counterparts. Furthermore, Iran's ships were manned by "cream of the crop" recruits and Western trained officers. The material condition of Iran's warships were assessed by US Military Liaison Group--Iran as "good and its crews well-trained." Of note, because of the required capability to make sophisticated repairs at sea, Navy enlisted technicians were far superior to their Army and Air Force contemporaries. For example, in December 1977, Iran's Army, with its poor recruit base and older equipment, had 2,600 US civilian technical advisors versus the IIN's 167. Having very few enlisted technicians, and using a special class of warrant officers to do rudimentary repair under the close supervision of US technicians, Iran's Air Force maintenance program was like the Army, also

significantly dependant of US assistance. In fact, in some squadrons (P-3F), US advisors did all maintenance.⁶⁰

With its newer and larger warships, the IIN needed more fuel and logistics support to maximize its growing sea control capability. To increase the fleet's range, endurance, and tactical flexibility at sea, Iran bought two underway replenishment oilers in 1974 from West Germany, and placed orders in the UK for two, later increased to six, Hengam-class logistical amphibious landing ships (LSL). After their delivery, the IIN added BM-21 multiple-rocket launchers to its LSL to improve their fire support and power projection capability in support of Iran's Marines.⁶¹

By the latter 1970s the Iranian Navy had added almost thirty support ships to its fleet, up from four only a decade earlier. With its new force of replenishment oilers, supply ships, tenders and tankers, Iran's sea control warships increased their presence in the Gulf, and for the first time kept a continuous presence at sea in the Gulf of Oman and North Arabian Sea, and made routine deployment patrols in the Indian Ocean as far south as the Maldives Islands, only 300 nautical north of the equator.⁶²

The Navy needed major improvements to its shore infrastructure to support and sustain its burgeoning fleet. By mid-1975, with Western assistance, the IIN had extended, dredged and upgraded Naval bases at Bushehr and Bandar Abbas. The addition of shore power and auxiliary steam to the Navy piers at these bases allowed the Navy to conduct some of its own (vice civilian shipyard) depot level maintenance. This added repair capacity enabled the IIN to return damaged warships to combat or operational status much more rapidly.⁶³

Eager to improve its long-range antiship surveillance and coordinated targeting capability, Iran bought six Lockheed P-3F maritime patrol aircraft in 1975, a modification of the US Navy's P-3C, carrying less sophisticated antisubmarine warfare equipment. The IIN also

pressed for, and later received, the US-built Harpoon antiship cruise missile system for the P-3F. With an operational radius of more than 1,000 miles, the Harpoon-armed P-3F gave Iran a potent maritime strike capability along the full length of the Gulf and throughout the northern Indian Ocean. Following its introduction with the P-3F program, Iran ordered 60 Harpoons for its new US-built destroyers and 95 of the missiles for the Combattante frigates.⁶⁴

To further his sea control ambitions in the Indian Ocean, the Shah contracted to buy six (later scaled back to four) of the US Navy's most sophisticated warships, the Spruance-class guided-missile destroyer (DDG). Although the Iranian Revolution annulled the scheduled 1980 delivery of these ships, the scale of this acquisition was immense. Program costs for the DDGs soared to over \$1.5 billion and included a package of complex simulator equipment, electronic and armament testing facilities, crew training for 3,000 personnel, and a long series of shakedown and qualification trials.⁶⁵

To complement its new destroyers, Iran purchased three US built Tang-class submarines. Deliveries of these ships were canceled by the US in 1979. As with the Spruance-class program, skilled technicians and the best officers were stripped from other ships to crew the new submarines. Although the Navy continued to receive Iran's best recruits, attrition rates at US Navy technical schools, where almost all IIN technical ratings were trained, had remained high. However, attrition rates for IIN submarine trainees were only 15 percent versus nearly 50 percent for standard IIN trainees. By mid-1977 the program had 288 graduates and maiden crews had begun at-sea training in the US. Furthermore, for the Shah, the IIN's future Tang-class boats, although completely overhauled and refitted with significant upgrades, represented merely an intermediate step to the eventual acquisition of ultramodern German-built type 209 submarines.⁶⁶

In addition, to its new ships and submarines, Iran began construction of a new Indian Ocean naval base and a maritime patrol aircraft runway at Chah Bahar. At the onset of the 1979 Revolution further requisitions for supply ships were pending, four more landing ships of the Hengam-class had been ordered, and a large replenishment oiler, the *Kharg*, was fitting out at Swan Hunter in Britain.

The Shah had also directed the Navy's top admirals to develop a long-range acquisition plan for a sea control navy of more than sixty-five modern warships and submarines. According to some sources, this acquisition plan amounted to a staggering eight billion 1978 dollars. Iran also had shown keen interest in the purchase of a small aircraft carrier to support a naval air arm at sea. This concept, actively solicited by Britain, was modeled on the Ark Royal-class very short take-off and landing (VSTOL) carrier. Besides ships, the Shah's new plan included the complete modernization of Iran's naval command and control system and the development of a national maritime signals intelligence capability.⁶⁷

In sum, at the end of Mohammed Reza's rein, Iran's massive naval build-up had, with large amounts of advanced Western technology, achieved the Shah's initial strategic goal of Gulf sea control, and had attained sea denial and limited sea control of the Gulf of Oman and northern Indian Ocean. By the mid-1990s, with its planned aircraft carrier battle group, fleet of sixty modern surface combatants, and maritime strike aircraft, Iran's Navy planned to add the complete northern Indian Ocean to its sea control umbrella, securing for good the seaward leg of its SCOG.

The Shah's Massive Military Buildup--Collapsing Under Its Own Weight

Bandar Abbas shipyard, still incomplete at the beginning of the Revolution, provided the IIN with one of the largest and most sophisticated shipyards in the Middle East, and would have

markedly reduced the Navy's reliance on foreign repair facilities. The shipyard was planned to employ 3,000 skilled Iranians and almost 200 US civilians; however, major problems confronted this program. Most support services needed to be in place by mid-1979, but contracts for major construction were still unsigned by late 1978. With most construction nearly two years behind, the new destroyers and submarines would have arrived nearly a year before the completion of basic support facilities, forcing the ships to steam on their own power. As a result, major maintenance and quality crew training would be impossible in port.⁶⁸

The Iranian Navy, Air Force and Army had other serious problems. The acceleration of the Shah's massive military buildup overwhelmed Iran's absorptive capacity, and in selected areas all services were on the verge of collapse under the weight of massive change. Compounding this issue were long introduction-to-maturity lead times for the Shah's complex new weapon systems and the fragility of their interdependence. For example, AWACS aircraft integration and completion of the SEEKSENTRY IADS were both crucial to Iranian air defense and to effective command and control of IIAF fighters on missions in support of ground troops. By 1978, AWACS delivery was already two years late, and the SEEKSENTRY system would not be fully operational until the early 1990s. (Among other factors, Iran's lack of these two systems gave the Iraqi Air Force free reign to strike at the majority of Iran's oil facilities, contributing to the poor performance of the Iranian Air Force during the 1980-1988 Iran-Iraq War.)

The shortage of skilled military personnel plagued the Shah's armed forces and continues to negatively affect the Islamic Republic today. An official US Department of Defense (DOD) intelligence estimate from the late 1970s stated, "There are insufficient Iranian personnel to maintain the new weapons which are already on order and will be delivered over the next decade."⁶⁹ In the IIAF's small P-3F squadron alone, US technical advisors staffed more

than half of the authorized IIAF maintenance positions. Moreover, Lockheed, the P-3's prime contractor, had expected to keep at least seventy-five technicians in Iran through the early 1990s despite the prohibitive costs of the P-3's fixed price contract.⁷⁰

Shortages of skilled military personnel stemmed from a number of complex obstacles deeply rooted in the Shah's failure to modernize Iranian society. Most military recruits had minimal exposure to modern technology; longer training pipelines and high attrition rates exacerbated this problem. Trainees preferred to be weapon operators, who had high prestige, rather than man technical positions which were perceived to be dead end jobs. This dilemma came to a head in the IIAF when disgruntled civilian and warrant officer technicians (Homofars) were among the first military cadres to openly join the Iranian Revolution. More than sixty percent of Iran's population was illiterate in 1978; this figure had not appreciably changed in 1997. Language difficulties compounded this problem. Most course material for the IIAF and IIN was, and still is today, in English.⁷¹

Worsening the training problems in the Shah's military was the poor retention of skilled technicians due to competition from the civilian economy. Experienced technicians earned several times as much in civilian life as in the military. Not surprisingly, this problem is still present in the Islamic Republic's armed forces. In postrevolutionary Iran, most military technicians moonlight at civilian jobs after duty hours, and tend to leave the service when their enlistment expires.

Beyond the serious technical and organizational problems already discussed, the Imperial Iranian Armed Forces lacked confidence in their institution, an issue that would weigh heavily against them during the Revolution and, later, in the war with Iraq. In spite of its advanced weapons, size and training, the Shah's military had no clear sense of group identity because of his meticulous compartmentalization of the Imperial services and his divide-and-rule

leadership style. Although the pre-revolutionary Iranian defense establishment was, in theory, a joint service organization, in practice it was far different. The abundance of anti-monarchical coups in the region, including his own brief overthrow in 1953, profoundly impressed the Shah. Following his restoration to power, the young ruler carefully exploited vicious personal rivalries and competition prevalent among his generals. His shrewd manipulations invariably prevented power concentrations that might have challenged his authority. In Imperial Iran, admirals and generals drew their strength and legitimacy primarily from their loyalty to the Shah, not from the size or capability of the forces they commanded. Thus, at the time of the Revolution, the leaders of Iran's Armed Forces, though generally competent, lacked an independent decision-making capacity, a distinct sense of identity, or a proven ability to coordinate action among themselves.⁷²

The command structure of the Imperial Iranian Armed Forces highlighted this problem. Five separate entities comprised the Shah's defense organization: the Supreme Commander's Staff (SCS); the three military services; the Imperial Guard (one division and a separate brigade); the Imperial Household Staff; and the Gendarmerie, a paramilitary organization under the control of the Interior Ministry except in wartime. Although broadly analogous to the US Joint Staff, the SCS was little more than a coordination body with no real authority over operational forces. Old-line Army personnel, a few Air Force officers, and few Navy representatives staffed the organization. On the eve of the revolution, there were only two Air Force generals and no admirals on the SCS. Notably, service participation on the SCS was inversely proportional to the Shah's long-range priorities and personal engagement. The IIN and IIAF consumed 85 percent of Iran's mammoth defense budget, yet the Shah, in an effort to reduce the influence of his premier services, kept Navy and Air Force participation on the SCS to an absolute minimum.⁷³

Compounding the impotence of the SCS, each service chief reported directly to the Shah (the Supreme Commander), who exercised unquestioned authority. Mohammad Reza required that all senior-level interservice communication between the services pass through him. Although most tactical, and some limited operational level cooperation between the services was permitted, the Shah made all strategic, operational employment, and even some tactical execution decisions. Of greater significance, the Services did not participate in the determination of their future roles, missions, or modernization programs. All prospective force structure concepts were personally designed by the Shah with the very limited participation of US advisors and the ruler's long-time Vice-Minister of War, General Toufarian. In the last several years of the Imperial era, General Toufarian was exclusively responsible for the procurement of all foreign military equipment and domestic military production; no input from the Services was allowed. He also was the single official flag-level point of contact for US advisors.⁷⁴

Paralysis of Command: The Fall of the Shah

Ayatollah Khomeini used the Iranian Armed Forces' prevalent discontent, low morale and frustration to alienate military members from each other and from society as a whole. In a September 1978 speech, Khomeini implored the Imperial Armed Forces to throw off the Shah's "yoke of slavery and humiliation," unite with their fellow compatriots, and overthrow the tyranny of the monarchy.⁷⁵ Khomeini's moves played on strong Iranian popular sentiments at the time that portrayed Iran's military as the stooge of US advisors. In an October 1978 newspaper interview, the Ayatollah carefully explained the relationship between US advisors and the Iranian Army, stating almost apologetically that the Army was:

In reality under American command--it is even led at the upper echelons by American advisors and technicians. . . .But there have already been, among officers and soldiers, evident signs of trouble as the popular revolt mounts."⁷⁶

Although this allegation was false--it was the Shah who ran the military--in late 1978 two obvious facts, both well known by the Iranian people, supported the Ayatollah's assertion: first, US technicians often made up more than half of Iran's technical and maintenance capability for many Iranian weapon systems; second, US advisors were rapidly leaving the country.

In the days before the fall of the Shah, Iranian troops were frequently being sent to brutally suppress protests for which they were neither trained nor equipped. For Iranian troops, this added to their already growing apprehension and lack of institutional bond. Iranian soldiers increasingly identified with the disaffected Iranian population and its champion, Khomeini. Eventually, many troops refused to participate in the repression, and those who did participate were often fired on by their own fellow servicemen. This compounded the growing paralysis among Iran's senior military leaders.

Coming amid deteriorating security conditions, the Shah's 16 January 1979 departure eliminated the military's only legitimate political power base. The already weak grip of Iran's senior generals on the military quickly deteriorated due to their lack of decisiveness, swelling negative public opinion, and partial mutiny among the troops. Furthermore, a pollyannaish impression of the Ayatollah's constant messages of conciliation and strong warnings against a military coup provided encouragement for military leaders to accept, and later tacitly support, the Ayatollah's assumption of power. Just before his return to Iran, Khomeini made clear his intentions:

There is a possibility that the treacherous Shah, now about to depart, will commit a further crime--a military coup d'état; I have frequently warned that this is probable. . . . I alert the Iranian army to this danger and I demand that all commanders and officers resolutely prevent the enactment of such a conspiracy and not permit a few bloodthirsty individuals to plunge the noble people of Iran into a bloodbath. Iranian Army: this is your God-given duty. If

you obey these congenital traitors, you will be accountable to God. . . . The Iranian people must treat the honorable officers and commanders of the army with respect. They must recognize that a few treacherous members of the army cannot sully the army as a whole. The record and responsibility of a few bloodthirsty individuals is something separate from the army as a whole. The army belongs to the people, and the people to the army. The army will not suffer as the result of the departure of the Shah.⁷⁷

The Failure of the Shah's Sea Power Strategy

The Shah's sea power strategy of a sea control Navy and Air Force capable of controlling the Gulf and its approaches to protect Iran's vital oil shipping was contingent on large amounts of advanced technology. Iran's I-Hawk surface-to-air missile system was critical to Iranian air defense and a key deterrent component of the Shah's sea control strategy in the lower Gulf. Consequently, a short case history examination of this weapon is useful to encapsulate the more pervasive problems found in Iran's prerevolutionary armed forces.

To strengthen its air defenses, Iran purchased 37 batteries of Improved Hawk surface-to-air missiles with deliveries beginning in July 1975. All but five batteries arrived before the start of the Revolution in 1978. Before the start of the Iran-Iraq War, Iran deployed its 30 batteries distributed between the Iraqi border, Tehran, and sites along the southern Gulf; the IIAF used two batteries for training and maintenance rotation. US technical advisors made up more than 60 percent of the maintenance personnel and 10 percent of the total I-Hawk force. At the delivery of the first I-Hawk system, Iran had no air defense doctrine, organization, personnel, training or logistics base to integrate the system. These problems persisted into the Iran-Iraq War and are still evident today. As with almost all major Iranian programs, the lack of skilled technicians plagued the I-Hawk from its earliest days.⁷⁸

Construction problems were another chronic problem for the IIAF Hawk program. On the eve of the Revolution, hard stand preparations of semi-permanent missile sites were a full two years behind schedule and only 40 percent finished while equipment deliveries and operator

training were more than 80 percent complete. The delay in fielding freshly trained crews with their recently groomed new equipment resulted in a crucial loss of perishable operator skills only months before the war with Iraq. To quote one DOD report in late 1978, "It may be years before the Iranians are able to maintain and operate their I-Hawk system effectively without US assistance. . . . This is not unexpected, since the I-Hawk is an extremely complex system which had been a challenge for even the US to deploy and support effectively."⁷⁹

The Shah's Sea Control Strategy--Conclusion

This chapter demonstrates that Iran's strategic center of gravity has always been its oil export and that the Pahlavi Shahs intended to protect Iran's vital oil flow through control of the Gulf and its seaward approaches with a sea power strategy of sea control. Under the last Shah, Mohammed Reza, Iran was building a massive sea control capability to dominate these areas. The final section of this chapter summarized the key elements of the Shah's sea power strategy and the intended end state of his sea control buildup, which was to have included a large surface combatants, modern submarines, a variety of maritime strike aircraft, and eventually a light aircraft carrier. Furthermore, this chapter provides convincing evidence that the Shah intended to build a massive air defense system to defend Iran against counter attack and to provide an umbrella for his naval forces. The role of Iran's Army in protecting Iran's SCOG, by contrast was to present a credible deterrent against a Iraqi attack and to control internal stability.

This chapter also presented evidence that the last Shah's vision of a large sea control force was never sustainable given the poor development level of Iran's technical and industrial infrastructure. Furthermore, the onset of the Iran-Iraq War caught the Shah's massive Navy and Air Force buildup at an immature stage of completion, and this factor (as will be donstrated

later) was the primary ingredient to the poor performance of Iran's Navy and Air Forces during the Iran-Iraq War.

Under the personalized rule of an absolute monarchy such as the Pahlavis, it is impossible to separate the state from its leader. In his infamous maxim, *l'etat c'est moi*, French King Louis XIV provided succinct insight into the nature of an absolute monarchy. Similarly, the aspirations of the Shahs to protect Iran's SCOG drove the strategic decisions of the Iranian state, just as Louis XIV's aspirations shaped the policies of prerevolutionary France.⁸⁰

In prerevolutionary Iran, the Shah made all major decisions. His personal perceptions, based on broad balance-of-power concepts and a long historical perspective, shaped and continue to affect Iranian planning. Central to both the Shah's and modern Iran's perceptions of their role in world politics is a keen awareness of the country's historic weakness vis-à-vis the outside world and its incessant determination to remedy this dilemma. Only in the last Shah's lifetime did Iran emerge to become an independent state from centuries of powerlessness before the competing pressures of Russia, Britain, and neighboring states. One outcome of this history was Iran's desire to be as independent as possible in assuring the defense of Iran's SCOG from all outside influence, including the US.

¹The *Cambridge History of Iran*, (Cambridge UK, Cambridge University Press, 1991), Vol 7., 664. *New Grolier Multimedia Encyclopedia*, 25/16.

²Ibid.

³John W. Limbert, *Iran at War with History*, (London UK: Croom Helm LTD, 1987) 82.

⁴George Lenczowski, *Iran Under the Pahlavis*, (Stanford CA: Hoover Institute Press, 1978) 423; Limbert, 85; and *The Cambridge History of Iran*, 664.

⁵Limbert, 85; and *Jane's Fighting Ships 1939*, (Thorton Heath, UK: Janes Ltd., 1939), 254.

⁶Lenczowski, 414.

⁷ Limbert, 88.

⁸Ibid., 29; and *The Cambridge Encyclopedia of the Middle East and North Africa*, 327-328; The social scars left by Reza Shah's relentless drive to secularize, modernize, and nationalize Iran were felt long after his reign and eventually sowed the seeds of the 1979 Iranian Revolution. Blunt, brutal, and ruthless, Reza Shah's singular vision was to rule a resurrected and unified Iran that dominated the Gulf. Of particular significance, his heir, Mohammed Reza fully absorbed this task and devoted his life to fulfill its end. Reza Shah despised refined Persian society; the effete social and religious trappings that undermined Iran's strength, and kept it permanently backward and subservient to foreigners. He reorganized the military forces, restored internal order, broke the power of the reactionary Shiite clergy, developed new industries, and revised the legal system. Impatient, direct, and abrupt, the Shah spurned the ideological debates of the politicians and bureaucrats. His words at the groundbreaking ceremony for the University of Tehran conveyed his intolerance for protracted debate that concerned Iran's development: "The establishment of a university is something that the people of Iran should have done a long time ago. Now it has been started, all efforts must be made for its speedy completion."

The Shah's Westerization of Iran was resented deeply by Iran's conservative Shia Muslims, the overwhelming majority of the population. Reza Shah's most damaging social and economic reforms involved the clergy and their predominantly traditionalist followers. To accelerate his secularization program, the Shah decreed that all Iranian citizens, including the clergy, wear Western clothing in public. Other laws compelled women to cast off the chador (veil) and men to wear suits, ties, and brimmed hats. The police and the military enforced the new code, and this frequently led to violent confrontations. The largest of these clashes occurred in Iran's second holiest city of Mashhad in 1935 where government forces beat, killed, and imprisoned hundreds. These events permanently subverted Reza Shah's reforms to Iran's dominant Shiite population, whose core beliefs were antiseccular. These reforms established the initial conditions for the Iranian Revolution of 1979 and its anti-Western disposition.

⁹Limbert, 85.

¹⁰Lenczowski, 393; and *Jane's Fighting Ships 1939*, 254.

¹¹US National Security Archive, "Suggested Approach during Moscow conference: 11 December 1945 Memorandum," and "Cable # 00699 - 151500zMAY46," *Iran: The Making of US Security Policy, 1977-1980*, (Washington DC, Library of Congress, 1990), 190.

¹²*Iran: The Making of US Security Policy*, 211.

¹³Limbert, 91; Pishavari's Tabriz Democrats brutally repressed opposition groups in the cities and crushed tribal rebellions in Ardabil, Zanjan, and Mandoab. By mid-1946, the Democrats ruled over a shattered economy and spreading political discontent. The Iranian Army, with the Shah at its head, marched into Azerbaijan on 10 December 1946 and entered Tabriz two days later, greeted by an uproarious popular welcome. Pishavari escaped to the USSR, other Democrat Party members were arrested, executed, or murdered by the mobs.

¹⁴US National Security Archive, "Answers to Question prepared by the State Department, JCS Memorandum SWN-4818, 12 October 1946, "*Iran: The Making of US Security Policy, 1977-1980*, (Washington DC, Library of Congress, 1990), 212. Note: this excerpt is taken out of SWN-4818 verbatim.

¹⁵*Jane's Fighting Ships 1959*, (Thorton Heath, UK: Jane's Information Group, 1959), 208.

¹⁶*Jane's Fighting Ships 1959*, (Thorton Heath, UK: Jane's Information Group, 1959), 208.

¹⁷*Iran: The Making of US Security Policy, 1977-1980*, 116; Limbert, 96.

¹⁸Limbert, 97.

¹⁹*Ibid.*, 98.

²⁰*The Military Balance 1978-1979*, (London UK; The [London] Institute for Strategic Studies, 1979), 37.

²¹US National Security Archive, "Personal message for the President from His Majesty The Shah, Telegram #00375, 17 August 1959, "*Iran: The Making of US Security Policy, 1977-1980*, (Washington DC, Library of Congress, 1990), 235.

²²*Strategic Survey 1973*, (London, UK: The [London] International Institute for Strategic Studies, 1973), 43-44.

²³*Iran: The Making of US Security Policy, 1977-1980*, 26 and 109.

²⁴Lenczowski, 400.

²⁵*The New Grolier Multimedia Encyclopedia*, (New York: Grolier Inc., 1992), Vol 25, 15-20.

²⁶Lenczowski, 400.

²⁷*Ibid.*, 399.

²⁸US National Security Archive, "Highlights of Two Hour Conversation between Shah and Ambassador Holms, Confidential Cable #00931, 29 April 1963, "*Iran: The Making of US Security Policy, 1977-1980*, (Washington DC, Library of Congress, 1990), 235.

²⁹Lenczowski, 401.

³⁰*The Military Balance 1963-1964*, (London, UK: The [London] Institute for Strategic Studies, 1963), 25.; *The Military Balance 1969-1970*, (London, UK: The [London] Institute for Strategic Studies, 1969), 34.

³¹*Strategic Survey 1973*, (London, UK: [Published by Brasseys for] The International Institute for Strategic Studies, 1973), 42.; Confidential Cable #00931, 29 April 1963 235; US National Security Archive, "US Policy Toward Iran, National Security Counsel, Report #5821/1, 15 November 1958," *Iran: The Making of US Security Policy, 1977-1980*, (Washington DC, Library of Congress, 1990), 19.

³²*The Military Balance 1969-1970*, 34.

³³Lenczowski, 402.

³⁴*Ibid.*, 414; Of note, Iran and Iraq eventually signed a new compact, as part of the Algeirs Agreement, in March 1975 that set the boundary as the deepest channel in the Shatt al-Arab, known as the Thalweg line.

³⁵*Ibid.*, 403.

³⁶US National Security Archive, "The Shah's Increasing Assurances, Central Intelligence Agency, Special Memorandum #00663, 07 May 1968," *Iran: The Making of US Security Policy, 1977-1980*, (Washington DC, Library of Congress, 1990), 268.

³⁷*Iran: The Making of US Security Policy, 1977-1980*, (Washington DC, Library of Congress, 1990), 26.

³⁸Lenczowski, 405.

³⁹*Ibid.*, 405.

⁴⁰Dan Caldwell, "Flashpoints in the Gulf: Abu Musa and the Tunbs," *Middle East Policy*, March 1996, IV, no. 3, 52.

⁴¹Lenczowski, 406.

⁴²*Ibid.*, 406.

⁴³*Ibid.*, 407.

⁴⁴"DOD Activities and Interests in Iran, Department of Defense, Confidential Report of 05 Aug 1975," *Iran: The Making of US Security Policy, 1977-1980*, (Washington DC, US National Security Archive, Library of Congress, 1990), fiche item 00980, 298.

⁴⁵Lenczowski, 407.

⁴⁶Ibid., 408.

⁴⁷"Iran Study: Interagency Report - Department of Defense and Department of State, 28 February 1978," *Iran: The Making of US Security Policy, 1977-1980*, (Washington DC, US National Security Archive, Library of Congress, 1990), fiche item 01317, 7.

⁴⁸"DOD Activities and Interests in Iran, Department of Defense, Confidential Report of 05 Aug 1975," E-4.

⁴⁹Ibid.

⁵⁰"Iran Study: Interagency Report - Department of Defense and Department of State, 28 February 1978," 9.

⁵¹"DOD Activities and Interests in Iran, Department of Defense, Confidential Report of 05 Aug 1975," E-4.

⁵²Lenczowski, 421-422.

⁵³"Iran Study: Interagency Report - Department of Defense and Department of State, 28 February 1978," 24.

⁵⁴"Iran Study: Interagency Report - Department of Defense and Department of State, 28 February 1978," 24.

⁵⁵Lenczowski, 421-422.

⁵⁶"DOD Activities and Interests in Iran, Department of Defense, Confidential Report of 05 Aug 1975," Annex E, Figure 5.

⁵⁷"DOD Activities and Interests in Iran, Department of Defense, Confidential Report of 05 Aug 1975," Annex E, Figure 5.

⁵⁸John Jordan, "The Iranian Navy," *Jane's Intelligence Review*, May 1992, 4, no. 5, 213- 217.

⁵⁹Jordan, 213., Jane's, 327.

⁶⁰*Jane's Fighting Ships 1979*, (Thorton Heath, UK: Jane's Information Group, 1979), 322; and "Iran Study: Interagency Report - Department of Defense and Department of State, 28 February 1978," 29.

⁶¹*Jane's Fighting Ships 1979*, (Thorton Heath, UK: Jane's Information Group, 1979), 322; and "Iran Study: Interagency Report - Department of Defense and Department of State, 28 February 1978," 29.

⁶²*Jane's Fighting Ships 1979*, (Thorton Heath, UK: Jane's Information Group, 1979), 322; and "Iran Study: Interagency Report - Department of Defense and Department of State, 28 February 1978," 29.

⁶³*Jane's Fighting Ships 1979*, (Thorton Heath, UK: Jane's Information Group, 1979), 322; and "Iran Study: Interagency Report - Department of Defense and Department of State, 28 February 1978," 29.

⁶⁴Mark Roberts, "Khomeini's Incorporation of the Iranian Military," *McNair Papers*, January 1996, Number 48, 8-9.

⁶⁵"DOD Activities and Interests in Iran, Department of Defense, Confidential Report of 05 Aug 1975," E-15.

⁶⁶"Iran Study: Interagency Report - Department of Defense and Department of State, 28 February 1978," 40.

⁶⁷Nicholas Cumming-Bruce, "West Germans, Dutch Compete For Massive Naval Orders," *Middle East Economic Digest*, March 1978, 13; "Iran's Massive Naval Buildup," *International Defense Review*, Number 4, April 1978, 305.

⁶⁸"Iran Study: Interagency Report - Department of Defense and Department of State, 28 February 1978," 40.

⁶⁹*Ibid.*, 32.

⁷⁰*Ibid.*

⁷¹*The Middle East and North Africa 1997*, (London, UK: Europa Publications, Ltd., 1996, 477-498 of 1103

⁷²Mark J. Roberts, "Khomeini's Incorporation of the Iranian Military, The Institute For National Strategic Studies, *McNair Papers*, Number 48, January 1996, (Washington DC: National Defense University, 1996), 2.

⁷³"DOD Activities and Interests in Iran, Department of Defense, Confidential Report of 05 August 1975," E-4.

⁷⁴Roberts, 9.

⁷⁵*Ibid.*, 10.

⁷⁶*Ibid.*

⁷⁷*Ibid.*, 22.

⁷⁸“Iran Study: Interagency Report - Department of Defense and Department of State, 28 February 1978,” 46.

⁷⁹*Ibid.*, 47.

⁸⁰US National Security Archive, “County Team Message: Shah and US, Fathoming the Shah,” Cable # 00789 - 281730zNOV65, *Iran: The Making of US Security Policy, 1977-1980*, (Washington DC, Library of Congress, 1990), 257.

CHAPTER 3

IRAN'S REVOLUTION AND THE IRAN-IRAQ WAR: SEA POWER IN TRANSITION

This chapter traces the Iranian military's transition through the upheaval of the Iranian Revolution, its incorporation into the Islamic Revolution, and the initial chaos of the 1980-1988 Iran-Iraq War. Following this discussion, it demonstrates the shift in sea power strategy from the Shah's sea power strategy of sea control to the Islamic Republic's sea power strategy of deterrent sea denial. Chapter three's key assertion is that the Islamic Republic adopted a sea denial strategy, clearly recognizing that an Imperial Iran's sea control strategy was unsustainable, and that a sea denial strategy would more efficiently achieve Iran's key interest of protecting its SCOG.

To support Iran's transition toward its current strategy of deterrent sea denial, this chapter demonstrates the evolution of the Islamic Republic's sea denial strategy during the Iran-Iraq War, focusing on Iran's successful sea denial experiences in the 1984-1988 Tanker War and the Iranian Navy's poor performance during its direct confrontation with the US Navy in the "Battle of the Frigates" of 18 April 1988. Given the defining significance of these last two events, these subjects will be presented as separate segments following a short introduction of Iran's sea denial strategy in the Iran-Iraq War.

Iran's Military Buildup--A Catalyst of Revolution

Iran's rapid military buildup in the mid-1970s generated excessive waste and corruption and brought tens of thousands of US citizens to Iran to work as consultants and technicians for

the Iranian armed forces. These later trends, together with increasing inequality, festering economic problems, and the absence of meaningful opportunities for political participation, created growing political unrest in Iran in the mid- to late-1970s, which the Shah's security forces harshly suppressed. Of the Shah's armed forces, only the Army engaged in repression of Iranian citizens. This fact would later frame the Islamic Republic's absorption and purge of the Iranian military during the 1979 Iranian Revolution.

Concerned with this unrest, Presidential candidate Jimmy Carter suggested that the US return to the Eisenhower Administration's Iranian policy of linking reforms to arms sales. These statements acutely heartened the Iranian opposition and worried the Shah, encouraging him to begin a limited program of political liberalization in early 1977. Following the election, however, the new Carter Administration backed off its earlier rhetoric, and returned US policy to the previous status quo. The Shah's limited reforms and the US's repudiation of promised improvements in human rights were important factors that unleashed the Iranian opposition.

On the morning of 8 September 1978, more than 20,000 people gathered in Tehran's Jaleh Square for a religious rally. Government troops ordered the crowd to disperse, and when they refused to leave the area, the troops fired directly into the crowd, killing several hundred people. This event, popularly known in post-revolutionary Iran as the Jaleh Massacre, or Black Friday, provided the initial galvanizing impetus that brought together a multitude of opposition groups and started the Iranian Revolution.¹

The outbreak of the Iranian Revolution caught Iran's military expanding at flank speed. Iran's armed forces were the largest in the Gulf area and, with the exception of Israel, the most modern in the Middle East. The Shah's total planned strength of 511,000 personnel in uniform by 1985 was to guarantee the security of Iran's SCOG. The keys to the Shah's sea power strategy, Iran's naval and air forces, had grown from an insignificant collection of outmoded

coastal patrol boats and aging fighter planes to an ambitious force designed to ensure regional sea control in and around the Gulf and to provide an effective deterrent against Iran's most immediate ground threat: Iraq.

The Reign of Terror: The Islamic Regime's Incorporation of the Iranian Military

Within Iran, the Khomeini regime, a prismatic coalition of political groups that opposed the Shah, was consolidating its power. In fact, the Iranian Revolution owed much of its success to the Islamic regime's effective incorporation of the Shah's military, especially the Imperial Army, into its power base. Once in power, the regime's adept control of Iran's Armed Forces ensured that Islamic authorities had the means first to exercise power, and later, to sustain it. The regime efficiently used the Army to suppress threats to its ascendancy (political opposition, ethnic and religious minorities, and foreigners) and, using the Army and the newly established the Pasadran (Pasadran means the Islamic Revolutionary Guard Corps--IRGC), quickly established a dominant power structure within Iran.

Khomeini knew that without his securing of the Armed Forces, leftists and autonomy-seeking ethnic minorities would threaten the Revolution. The Ayatollah correctly identified the military, especially the Army, as the "key to the success of the Revolution." Khomeini gradually colored the Armed Forces senior leadership as inimical to the best interests of Iranian society, but whose rank and file junior members, including junior officers not part of the established power structure, were victims who would be accepted into the new system if they revolted.²

Almost immediately following Khomeini's ascension to power, much to the generals' chagrin, extreme radicals of Khomeini's broad coalition demanded more concessions than the Ayatollah originally had intended. The Ayatollah's initial plan called for a "purge of the Armed Forces . . . on a limited scale concentrating on corrupt elements."³ However, newly

empowered radicals in the Ayatollah's self-appointed Revolution Committee, the organization in control of the purge process, were eager to settle old scores. The new regime arrested and publicly displayed leading military figures in what was to become a string of arbitrary arrests and summary executions.

Because of its direct role in suppressing dissent under the Shah, the Army was the hardest hit of the three services in the purge process. In a 3 April 1979 press conference, the Islamic Republic's Deputy Prime Minister Entezam stated, "Army officers [not already executed] from the rank of brigadier generals on up will retire."⁴

In the six months after the start of the revolution, the size of Iran's Armed Forces dropped precipitously from slightly over a half million to less than 300,000 troops; the Army absorbed more than 90 percent of the cuts. With the overwhelming majority of senior officers gone, and without the required cadre of US technicians to maintain their sophisticated American equipment, Iran's military services fell into a sad state of disarray, low morale and poor combat readiness. Iran's Air Force was essentially grounded, and in the Navy, enlisted sailors refused to perform manual labor until joined by their officers, stating "We are equal now."⁵

By the end of 1979, Iran's Armed Forces were on the brink of collapse. A US Department of Defense report from November 1979 stated that: "Iran's armed services are no longer an effective military force." Referring to a long list of arrests, executions, involuntary retirements and desertions, this US report also maintained that discipline had "virtually disappeared." Compounding the loss of US maintenance technicians, the logistics systems in Iran's most technologically dependent services, the (newly christened) Islamic Republic of Iran Air Force (IIAF) and Islamic Republic of Iran Navy (IIN), had dissolved.⁶

Collapse of Iran's Sea Control Forces

In July 1980, the IIAF suffered even further in the wake of a failed coup attempt in which IIAF pilots, in collaboration with several Army officers, attempted to seize F-4 and F-5 fighters based at Shahroki air field in western Hamadan Province. Once captured, the planes were to bomb a number of pre-planned targets, including the Ayatollah Khomeini's home in Tehran. The failed overthrow resulted in a ruthlessly thorough purge of the Air Force. The Revolutionary Council arrested and eventually executed more than 300 IIAF officers and Army personnel in connection with this event. The IIAF would not recover from the cumulative personnel losses of the 1979-80 purge until the mid-1990s.⁷

In an attempt to improve the sagging moral of the Armed Forces, the Ayatollah issued an order to end the arbitrary arrest and prosecution of military members by the revolutionary courts. This order, issued on 8 September 1980, also stated that allegations against an accused service member were not to be made public until the soldier's guilt was proven.⁸

On 22 September 1980, two weeks after Khomeini ended the Armed Force's purge, Iraq invaded Iran. Initial Iranian resistance to Saddam Hussein's forces was weak and fragmented. The Shah's strategy for war with Iraq had hinged on air superiority over the Iraqi air forces, followed by continuous close air support of counter-attacking Iranian ground and naval forces. Unchallenged by the decrepit IIAF, Iraqi troops rapidly advanced into western Iran, hardly affected by the decaying weapons in which the Shah had invested billions. IIAF pilots were scarce and flying proficiency was abysmally lower than before the revolution. US technicians who left Iran during the days preceding the fall of the Shah succeeded in erasing inventory records, ripping avionics packages out of the new F-14s, and destroying caches of repair parts at most IIAF bases. The result of these actions was an Iranian Air Force that faced considerable problems maintaining its planes and its combat effectiveness. During the entire war, Iran

conserved its sparse fighter-bomber sorties for strategic interdiction missions and anti-ship attacks.⁹

The other limb of the Shah's sea control strategy, the Navy, would fare little better than Iran's Air Force. After its ascent to power, the Islamic regime's leaders promptly canceled orders for the large destroyers of the Kooroush-class, the Type 209 submarines, and two of the four LSTs of the Hengam-class. The regime shelved and later abandoned the transfer of the Tang-class submarines. Iran hastily rejected a generation of close connection with the US; the precipitate deterioration in the relations between the two countries culminated in the US embassy hostage crisis. In response to this event, the UN placed an embargo on the delivery of military equipment to Iran. This applied specifically to the large replenishment oiler *Kharg*, the LSTs building at Yarrow UK, and the last three Combattante-II-class missile boats fitting out at Cherbourg, France.

In addition to the canceling of existing orders, the West's reaction caused munitions and spare part resources to be instantly frozen, and technical advice on the installation and maintenance of weapons systems and propulsion machinery ceased. The Shah had shopped from a wide assortment of dealers in his pursuit for the most economically favorable arms deal. This limited the standardization of equipment. For example, in the small surface force alone, ships utilized the US 5-inch, British-4.5 inch and Italian-built 76 millimeter (mm) guns, and radars of US, British, Dutch and Italian origin. As for power plants, warships and auxiliaries were equipped by a multitude of different manufacturers, including British and US Navy geared steam turbines, British gas turbines, and diesels supplied by MAN-MTU of Germany, Fairbanks-Morse (USA), and Paxman (UK).

Although the Navy's purges were significantly less bloody, they were as equally thorough as in the Air Force and Army. On a single day, 7 February 1980, more than 95 percent

of the IIN's admirals and senior captains involuntarily retired. This complete upheaval in the IIN's institutions and the collapse of an unfinished support infrastructure aggravated the Iranian Navy's deteriorating situation. Consequently, when Iraq invaded Iran, the Iranian Navy, without spare parts for more than a year, or adequate leadership to ensure vital repairs were made, was already a wasting asset. Most vessels were out of service because of mechanical problems, and the perishable skills of the IIN's technical ratings lay unused. Moreover, cut off from Western arms suppliers, Iran knew that operational losses of its ships or their systems were not replaceable. Damage and equipment failures were impossible to repair and there was no stocked replenishment capability for expended cruise missiles and main gun munitions.

Iran's New Sea Denial Strategy for the Iran-Iraq War

By 1980, the new Islamic Republic was well aware of Iran's SCOG. It had correctly recognized that the Shah's strategy of Gulf sea control was never sustainable, and that it was clearly impossible to carry out to any degree in the near term, given that Iran had been cut off from Western arms, and that Iran's sea power forces were deteriorating rapidly. The Islamic Regime understood that the Shah's exorbitant spending on high-priced sea control weapons contributed to his downfall.¹⁰ Moreover, since the Shah's sea control forces were only capable of protecting Iran's SCOG interests against a regional player, and that Iran's new potential threats (the US, UK and France) were vastly superior in terms of sea control capability, any direct confrontation with these navies would certainly result in a needless defeat.¹¹

For nearly three years following Iraq's September 1980 invasion, most of Iran's warships were either kept out of harms way in Bandar Abbas or were mechanically inoperable, Iraq's unchallenged Air Force even managed to sink at least one Iranian missile boat in November 1980 and two US-built Bayandor-class corvettes in 1982. In May 1983, after

absorbing three months of significant losses to the maritime portion of its SCOG (Iraq had started the Tanker War in earnest in March 1984), Khomeini's Supreme Council for National Security (SCNS) began to look at options for a new sea power strategy, and a new force structure that effectively protected the sea leg of Iran's SCOG, at an affordable and sustainable cost.¹²

Unable to protect its tankers and oil platforms effectively, the Islamic Republic turned to a limited strategy of sea denial--similar to the *guerre de course*--by attacking ships and oil interests of countries that it believed supported Iraq. Attacked states, such as Kuwait, which bore the brunt of this strategy, would then presumably pressure Iraq to cease attacks on Iran's oil. Although this strategy eventually turned against Iran when outside powers, primarily the US, intervened to stop Iranian attacks on shipping, this general strategy continues to shape Iran's current force structure.¹³

By late 1984, Iran was reshaping its sea power force structure toward an effective and more sustainable sea denial strategy. This more affordable force structure eventually focused on naval special warfare forces including the Iranian Revolutionary Guard Navy--IRGCN, minisubmarines, shore based antiship cruise missiles (ASCM), an extensive mining capability, ASCM-armed patrol boats, and a new southern Gulf air defense network. The chief vulnerability of the Shah's conventional naval forces was poor air defense capability. This deficiency was overcome by the stealth of submarines, by the high speed, small size and low force concentration of ASCM-armed patrol boats, by increased mining capability, and by the revetments of ASCM shore batteries.

The Iran-Iraq Tanker War (1984-1988)

The Gulf Tanker War is a defining event in Iran's sea power history and provides the most telling indications of the Islamic Republic's sea power strategy of sea denial. In its earliest

stages, the conflict between Iran and Iraq was primarily on land with small naval units playing only a minor supporting role in the disputed area around Korramshahr. By 1984, the Iraqi leadership realized that it had lost the initiative in the ground war and decided to shift the focus of its efforts toward airpower. An essential element in Iraq's strategy was to cripple Iran's economy by attacking its SCOG: first, by occupying a key Iranian oil producing areas near Iraq's Faw Peninsula; second, by attacking Iran's vital oil transshipment facilities on Kharg Island from which Iran shipped 85 percent of its oil exports by tanker. Kharg became the prime Iranian target for the Iraqi Air Force's F-1 mirage fighters armed with the Exocet ASCM.¹⁴ As previously discussed, Iran, unable to attack Iraq's pipeline oil exports directly and unable to defend Kharg adequately from air attacks, responded with its own sea denial attacks against non-belligerent Gulf tanker traffic it hoped to coerce states providing moral and significant financial support to Iraq, most notably Saudi Arabia and Kuwait, to pressure Iraq into ceasefire.¹⁵

The Iranian Air Force shouldered the initial tanker attacks. A squadron of McDonnell Douglas F-4D/E Phantom IIs moved from Vahdai Air Force Base to Bandar Abbas airport and began maritime strike re-qualification training in early 1984.¹⁶ Although the Air Force conducted the actual attacks, the SCNS assigned the authority for aircraft launch orders and antiship mission targeting to the Iranian Navy. The IIN fused its targeting information and controlled F-4 antiship engagements from its recently completed 1st Naval District Headquarters in Bandar Abbas. The IIN's tanker targeting team correlated data from various origins, including IRGC operated tracking stations on oil platforms, IIN shore-based radar stations along the Straits of Hormuz, and national level intelligence reporting from Tehran (received via microwave or troposcatter telephone). In the final stages of target selection, the 3rd IIAF Air Defense Sector operations center (collocated in the same building complex as 1st Naval District

and Persian Gulf Fleet Headquarters) launched Air Force P-3F maritime patrol aircraft to obtain the latest target location and visual identification confirmation, if required.¹⁷

Iran's first ship attack occurred 13 May 1984, when an Iranian F-4 hit the tanker Umm Casbah, carrying Kuwaiti crude oil some 85 nautical miles off Bahrain, with a AGM-65a Maverick ASCM. Iranian pilots attacked four more ships carrying Kuwaiti oil in May and struck a fifth tanker en route to Kuwait on 10 June. Use of the IIAF's small number of operable Phantoms, and the fact that Iran struck several ships outside the declared war zone, indicate the seriousness with which Tehran viewed the situation. Tanker damage was for the most part minor and there were no casualties. These strikes quickly consumed Iran's limited stock of operable Mavericks, and from mid-1984, the F-4s conducted attacks with Chinese-made 57 mm air-to-surface rockets.¹⁸

The IIN frequently canceled attacks during this phase of the targeting process because of the unreliability of the IIAF's Levan Island based P-3Fs. The squadron's lack of spare parts and poor maintenance limited maritime aircraft patrols to rarely more than two per day. This shortfall routinely forced the Air Force to supplement P-3 sorties with detachments of Lockheed C-130E/H Hercules medium-lift aircraft from the Shiraz transport squadron.¹⁹

The IIN's manual processing of perishable targeting data, and exclusive dependence on unreliable aircraft, prompted the Iranian Navy and IRGCN to press the government for acquisition of an integrated shore-based anti-ship cruise missile system. In mid-1984 the Khomeini regime granted the IIN negotiating authority for acquisition of the Silkworm ASCM system, a weapon heavily solicited by the Chinese. Although operationally divided between the IRGCN and regular Navy, tactical Silkworm launch orders came directly from IIN headquarters in Tehran.²⁰

While extreme distrust and competition permeated relations between IRGC and Regular Army ground forces, interchange between the IRGCN and IIN was generally cordial. The IRGCN's light attack and special operations capabilities usually complemented the IIN's conventional force structure. In addition, both services shared the IIN's command and control network.²¹

Better funded than the regular Navy, the IRGCN received the overwhelming majority of new equipment and foreign advisor training during the War. These enticements, as well as a reputation for boldness, provided an attraction that the lumbering IIN could not offer. It is therefore not surprising that a significant number of IRGCN officers, and almost all maintenance technicians were, and remain today, former IIN personnel. As further evidence of this close relationship, the IRGCN and IIN merged nearly all senior leadership, training and logistical functions after the Iran-Iraq War. (Of note, in December 1989, the SCNS "dual-hatted" Rear Admiral Ali Shamkani, already chief of the IIN, as commander of the IRGCN).²²

The Iranian tanker attacks remained very selective, hitting only confirmed Iraqi ships. However, on 5 July 1984 an attack on the tanker *Primrose*, a ship carrying Saudi crude, significantly expanded Tanker War's scope. During the remainder of the year, the Iranian Air Force hit 13 more ships and extended its attacks along the Gulf almost to the Straits of Hormuz. The liquid-gas carrier *Gaz Fountain*, and the diving support ship *Pacific Protector* (Panamanian flagged), were hit by fighters on 12 and 19 October 1984. Severely damaged by fire and beyond economical repair, owners salvaged the ships for scrap.²³ The attack on *Pacific Protector* saw the heaviest loss of life to date: two men killed and 11 reported missing. However, Iranian ship attacks rarely seem to have inflicted casualties, and the total by the end of the year the death toll was only 23.²⁴

IIRAF fixed-wing aircraft maintained this attack pattern through 1985, peaking at 12 strikes on 31 July 1985. However, exhaustion set in, resulting in an overall decline in the IIRAF's maritime strike effort, despite the transfer of a second Phantom squadron to Bandar Abbas in June 1985. Iran attacked only four ships during the latter half of the year. A severe spare parts shortage made operation of the F-4s increasingly difficult. Furthermore, Iran's ground forces, then engaged in major ground assaults, renewed calls for close air support.²⁵

The emphasis of Iranian Tanker War tactics shifted in July 1985 to helicopter attacks using the Iranian Army's US-built AH-1J Cobras. With operations staged from both Reshadat oil platform and Abu Musa Island in the southern Gulf, helicopter attacks totaled 21 in 1986 compared with 16 fixed wing attacks. However, demands for close air support in the newly captured Faw Peninsula, and an increase in ground operations, pulled the majority of rotary-wing assets to the ground war.²⁶

By the fall of 1986, the IIRAF surface ships had entered the ever-escalating Tanker War. The Navy conducted its first attack on the Kuwaiti-flagged super-tanker *Al Funtas* in early September, and by year's end, conducted attacks on three more ships. Most IIRAF attacks were performed at close range (within 10 nautical miles) by Saam-class frigates using the small British made Seakiller ASCM. As Seakiller inventories fell toward war reserve levels, Iran's frigate captains began to close for main-battery gun engagements. Attacks normally took place at night in the southern Gulf. Receiving fused targeting information from IIRAF headquarters in Bandar Abbas, the Navy surface ship attacks focused in the northern terminus of the Straits of Hormuz or in the littoral area adjacent Iranian territorial waters.²⁷

To increase the potency of its Tanker War campaign, Iran began to lay mines in early 1987. Produced indigenously with North Korean assistance, the design of Iran's new mines were based on the World War I vintage Russian M-08 contact mine. The Iranian Navy laid M-08

mines in the Gulf of Oman, the northern waters of the United Arab Emirates, and in the dredged approach channels of Qatar. Iran's new weapon dramatically raised the stakes for shipping oil in the Gulf, a primary objective of a sea denial strategy. With the new risk, shipping insurance rates rose sharply from .25 to 7.5 percent of cargo value. This had a significant negative impact on Gulf shipping. With less than 200 low technology mines, Iran had clearly gained the initiative in the Gulf with its sea denial strategy; all at minimal cost.²⁸

The first ship struck an Iranian mine on 5 January 1987; nine more hit mines before the year's end. By mid-June 1987, the US Navy detected Iranian M-08 mines in the main deep-water channel leading to Kuwait's Mina Ahmadi oil terminal. This event opened a major mine clearance operation, and clearly demonstrated the sea denial efficiency of Iran's antiquated, but effective mines. Saudi and US Navy minesweepers took more than a month to clear a single channel to Kuwait's largest oil terminal.²⁹

Laid by a variety of platforms, ranging from the IRGCN's Abu Musa-based Bogghammer fast patrol boats to IIN mine layers, the effectiveness of Iranian mine fields depended greatly on crew proficiency. Inevitably, because of poor mine-launcher training and excessive speed during deployment, some mines failed to release from their carriage assembly and sank. Others severed their mooring cables and free floated, causing an indiscriminate hazard to safe navigation, a hostile act and a violation of international law. These serious technical flaws and their consequences threatened to expose Iran to US retaliation, and in April 1987 the Iranian Navy initiated its own minesweeping effort in the Straits of Hormuz under the pretense of "improving the safety of the waterway for safe navigation." Iran learned from these mistakes, and later limited minelaying to IIN minelaying ships and a few Abu-Musa-based IRGCN Boghammer crews.³⁰

After the start of its full mining campaign, Iran began to prepare hard stand launching sites along the Straits of Hormuz for its newly acquired Chinese-built HY-2 Silkworm anti-ship cruise missile (ASCM) systems. Iran had already fired the reverse-engineered Soviet Styx SSN-2A/B (liquid hydrazine propelled) Silkworm from captured Iraqi batteries in the northern gulf with devastating effects against shore targets at the Kuwaiti Oil Tanker Company terminal. Although ineffective against modern warships equipped with rudimentary electronic countermeasures and chaff decoys, the Silkworm's 1,000-lb warhead is nearly three times the size of the Exocet.³¹

By the end of April 1987, Iran had two major Silkworm missile sites completed, a dozen missile launching batteries, at least forty-eight Silkworm missiles, and three mobile Ricepad radar surveillance targeting van systems. Prepared sites included a hard stand for the missile launcher and single cable junction box for land line remote targeting data from the Ricepad radar. Most launcher positions also included a rear tunnel behind the hard stand to conceal launcher operations from imagery collection efforts, and to increase the site's survivability from air strikes and naval gunfire. In late May, because of increasing tensions with the US, Iran moved one missile battery from Queshim Island in the Straits of Hormuz to the formidable Hawk missile umbrella on the edge of Bandar Abbas Naval Base. The other battery relocated to the east at Iran's Kuestak site.³²

Bandar Abbas Naval Base's Hawk missile batteries were of the new Improved-Hawk (I-Hawk) variety received the previous year from the US as part of the covert Iran-Contra agreement. In total, the US delivered more than eighty missiles and accompanying radar upgrade parts between November 1985 and July 1986. Paradoxically, the final shipment of I-Hawk radar upgrade equipment destined for Bandar Abbas was on the same flight as National

Security Advisor Robert McFarlane's secret delegation to Tehran. All this occurred just as the unwitting US Navy was planning air strikes against an undefended Bandar Abbas Naval Base.³³

Iran was fully aware that the US would retaliate sharply if Iran launched Silkworm attacks from its SOH sites. However, Iran's mere possession of the threatening Silkworms had dictated the reaction of the US and other powers. Iran was steadily learning the value of a sea denial deterrent.

By late July 1987, the US, Japan and other Western powers became increasingly alarmed at the growing threat to Gulf oil flow. Western naval forces began to arrive in the Gulf region at an increased pace. The French aircraft carrier *Clemenceau* arrived in the North Arabian Sea in August and began informal coordinated air strike training with the US Navy *Ranger* carrier battle group.³⁴

Iran, enjoying the full benefits of its sea denial strategy, stepped up attacks on Kuwaiti shipping, and initiated a subversion campaign inside Kuwait. Pressured by the spreading Iranian threat, and with no help from its unreliable confederate Iraq, Kuwait felt it had little option but to look to the US and the Soviet Union for naval protection of its oil exports. Elated at the opportunity to increase its Gulf influence, the USSR was the first to respond. The two countries quickly finalized an agreement to charter three Soviet tankers. Concerned with the possibility of expanding Soviet influence in the heart of the West's oil supply, the US belatedly reconsidered its earlier refusal to become involved, and agreed to place 11 Kuwaiti tankers under the US flag, thereby qualifying them for US Navy protection.³⁵

The inherent risks to both neutral navies and non-combatant shipping steaming in the constricted war zone of the Gulf became well appreciated by both the US and the USSR. On 16 May an unarmed Soviet cargo ship was attacked by IRGCN fast boats, and in the evening of the same day a Kuwaiti-chartered Soviet tanker struck an Iranian mine while transiting Kuwaiti

waters. On the following day, the improvident Exocet ASCM attack on the USS *Stark* by a mistaken Iraqi pilot cost the lives of more than 40 American sailors.³⁶

Iran's naval mine was a cheap and very effective equalizer. Moreover, it was clear that this type of threat challenged even the modern mine warfare capabilities of Western and Soviet naval forces. Within a few weeks, several Western navies boosted the small US and Gulf Cooperation Council mine sweeping force by more than a dozen ships.³⁷ The bulk of Iran's offensive mine laying ended on the night of 21 September, with the US Navy's attack and capture of the Iranian Navy amphibious landing ship and makeshift minelayer *Iran Ajar*.³⁸

The following month, IRGCN Boghammers, which had been firing on a US flagged tanker, were attacked by US Kiowa Warrior armed helicopters. After the helicopters sank three fast boats and captured four others, Iran vowed a "crushing response" to the US attack. The IRGCN Naval arm and Iranian Navy backed up this threat with a series of provocative joint exercises near Farsi Island. The exercises culminated with a coordinated attack against simulated tankers under "enemy" escorts on 03 October.³⁹

On 14 October Iran fired one Silkworm missile southwest from the Faw Peninsula toward Kuwait's Shuaiba oil terminal off al Ahmadi, a distance of 40 miles, hitting the newly arrived US-owned (but Liberian-flagged) tanker *Sungari*. Two days later Iran fired a two Silkworm missile salvo from Faw at the US-flagged tanker *Sea Isle City*, destroying most of the ship's superstructure, and wounding ten crew, including and blinding US national Captain John Hunt. The 81,283-ton ship was a total loss. Although the Kuwaiti government intensely pressured the US to strike the Faw Peninsula Silkworm sites in retaliation, the US response was to destroy Iran's southern Gulf Rostdam oil platforms (also spelled Reshadat, Rostam and Rustam before the revolution). Kuwaiti officials became increasingly concerned at the US's credibility to conduct promised retaliatory strikes on Iran's Silkworm sites for attacks on its US-

flagged tankers. With only a few shots fired, Iran had partially succeeded in dividing the new US-Kuwait coalition. As an integral part of Iran's sea denial strategy, Tehran's modest Silkworm buy had already paid significant dividends.⁴⁰

The US Navy's destruction of the Rostam Oil platform (which had ceased oil production two years earlier) was a complete surprise to Iran's leaders. The attack, conducted unopposed and in conjunction with an elaborate deception plan, destroyed a vital radar tracking site that the IRGCN relied on to stage its attacks and to coordinate joint attacks with the Iranian Navy. Loss of this vital hub would retard the volume of tanker attacks, and later, shift the bulk of the southern Gulf Tanker War back to the Iranian Navy, equipped with organic ship mounted radars and C2 systems.⁴¹

With the destruction of Rostam, and the onset of winter weather, compounded by the chronic shortage of spare parts for the regular Navy, Iran's side of the Tanker War slowed and Iranian attention shifted to the ground war. By the end of 1987, Iran's Navy and IRGCN had struck a total of 87 ships, more than double the 1986 count.⁴²

With improved weather, the early Spring of 1988 brought a new Iranian mining campaign. On 14 April 1988, the new effort claimed its first casualty, the USS *Samuel B. Roberts*. The mine's 258-lb TNT warhead tore a nine-foot gash in the keel of the 3,700-ton ship, almost sending her to the bottom. More than twenty wounded crew members, including ten badly burned sailors, were evacuated by helicopter to Bahrain. Almost immediately, the US and other Western navies began a frantic search for other newly sown mines.⁴³ Balanced in favor of benefits, the cost benefit balance of Iran's mining campaign, to the point, would soon change abruptly.

"Battle of the Frigates," 18 April 1988

The US retribution for *Samuel B. Roberts* was swift and devastating for the Iranian Navy. The US riposte started four days later with the destruction of the *Sassan* (also spelled *Salman*) and the Sirri Island oil platforms in the southern Gulf. With the loss of *Rostam*, the IRGCN had completely refitted *Sassan* as the IRGCN's replacement surveillance platform in the southern Gulf. The attacks set off a series of engagements between US forces and Iranian ships and planes that lasted for nine hours. At the *Sassan* oil platform, the shelling began shortly after 1:00 a.m., on 18 April. The US warships shelled the main platform for several hours. American Marines from the nearby USS *Trenton* searched the secondary platform, and destroyed it with explosives.⁴⁴

USS *Wainwright* led the three warship raid on Sirri Island. During the shelling, the Iranian 1st Naval District Commander ordered the *Combattante-II* missile corvette *Joshan* to respond. The swift corvette rapidly closed on Sirri, and when on the horizon, fired the Iranian Navy's only remaining US-built Harpoon anti-ship cruise missile. With the inbound missile in flight, *Wainwright* returned fire with the ship's supersonic SM-2ER surface-to-air missile system, in the surface-attack mode. *Joshan's* Harpoon missile seeker (which had no maintenance since 1979) failed less than one mile from its intended target, its 500-lb FTX warhead missing *Wainwright's* stern by less than 100 feet. *Wainwright's* small 65-lb warhead SM-2ER smashed into *Joshan* at more than 2,000 kts, along with two other SM-2's fired by *Wainwright's* escort frigate USS *Simpson*. *Joshan*, instantly aflame, sank in a conflagration of successive explosions and billowing smoke in less than five minutes. Twenty minutes later, a two-plane flight of Iranian Air Force F-4s streaked over the horizon at low altitude and counterattacked, firing two Mavericks that missed their targets. Following their unsuccessful

attack, both jets returned to Bandar Abbas, one fighter plane having received minor damage to its rudder from a missile impact.⁴⁵

Less than thirty minutes after the battle at Sassan, the Panamanian owned, but American operated oil platform *Scan Bay* in the Mubarak oil field, some thirty nautical miles west of Abu Dhabi, came under Iranian fire. IRGCN Boghammar speed boats, and a pair of Iranian Air Force AB-212 helicopters mounted a coordinated attack with heavy machine-gun fire and anti-tank rockets. At dawn, nearly an hour after the attack started, US Navy A-6s from the carrier USS *Enterprise* responded, and engaged three of the fleeing Boghammars, sinking one and disabling another. *Scan Bay's* sixteen US citizens received only minor injuries and the platform only slight damage.⁴⁶

Meanwhile, during the Sirri engagement, Tehran ordered the emergency sortie of the frigates *Sahand* and *Sabalan* from Bandar Abbas. With orders to retaliate against US Naval forces, the Iranian frigates sped at flank-speed towards the bulk of the US warships patrolling west of the Straits of Hormuz. With approaching Iranian warships, the US Joint Task Force-Mideast commander dropped plans to attack a third oil platform at Rakash, and moved in for a decisive engagement with *Sahand* and *Sabalan*. Shortly after 3 p.m., *Sahand*, then ten miles southwest of Larak Island, was in position for a Seakiller cruise missile engagement on US Navy ships. At 3:59 p.m., a US warship warned *Sahand* by radio in Farsi and English to leave the area immediately or be taken under fire. The defiant Captain of *Sahand* responded minutes later by opening his 76mm main battery. Almost immediately, US Navy A-6s struck *Sahand* with a Harpoon cruise missile, then blasted it several minutes later with bombs. In addition, the frigate USS *Strauss* scored a direct hit with a second Harpoon. *Sahand*, left ablaze with its superstructure ripped off, launched life boats, and began to abandon ship.⁴⁷ Nearly two hours later another A-6, after receiving fire, dropped a laser guided bomb on *Sabalan*. The single

1,000-lb laser-guided bomb hit with deadly accuracy into the center stack of *Sabalan's* engine room, completely destroying the small frigate.⁴⁸

End of the Iran-Iraq War

As a result of the "Battle of the Frigates," Iran's first direct engagement with the US Navy, half of Iran's major warships were out of action. Notably, these losses came the same day that Iraq dislodged Iran from the strategic Faw Peninsula, which Iranian forces had held for more than two years.⁴⁹ President Khamenei summed up Iran's frustrated temperament by vowing attacks on "US interests throughout the world for criminal America's all-out war of aggression against Iran." Speaker Rafsanjani called for a new wave of volunteers to assail Iraq on all fronts on the precept, "The anti-Islamic arrogant powers have decided to make a serious attempt to save Saddam (Hussein) and tie our hands."⁵⁰

Refusing to submit to US pressure, Iran attacked a Saudi tanker anchored off Dubai with IRGCN fast boats on 24 April 1988. Washington, in turn, again raised the stakes. On 30 April, Defense Secretary Frank Carlucci announced that President Reagan had personally directed an expansion of the US Navy's tanker protection umbrella. The new commitment included the defense of neutral, non-communist merchant ships, if they requested.⁵¹

Iran, under pressure, became fully occupied with Iraq's new June amphibious offensive in the Majnoon Islands. The Islamic leaders dispatched the remaining operational units of the Iranian Navy and IRGCN fast boats north to thwart the invasion. Iraq's devastating new assault included the largest chemical warfare attack since World War I. Thousands of artillery shells packed with cyanide and sarin nerve agent bombarded the Iranian lines. Iraqi paratroopers cut off the eastern edge of the islands while the elite Presidential Guard staged a frontal assault from hovercraft. Surprised and encircled, Iranian troops fought desperately. Trapped in heavy

chemical protection suits, Iranian troops roasted in the Gulf's summer heat, where temperatures soared to nearly 120 degrees. The Iraqi Third Corps commander promptly crushed the Iranian counter-attack. Iraq had deployed an impressive 600 pieces of artillery and more than 2,000 tanks to back the main assault.⁵²

By late June 1988, the Iranian Supreme Council for War Support conceded major setbacks in the ground war, and decided to shift its focus on an obtainable objective. Hungry for a success, Iran began aggressive surveillance of the US Navy's armed barges *Hercules* and *Townsend*, anchored in Kuwaiti and United Arab Emirate (UAE) waters. IRGCN fast boats stepped up patrols from Abu Musa Island, and poised for a new confrontation with the US. American intelligence anticipated that Iran would make a symbolic strike against US forces on the 4th of July, and a veil of vengeance shrouded the Gulf.

On 3 July IRGCN fast boats fired on a patrolling helicopter from the USS *Elmer Montgomery*. The closest Navy warship, the cruiser USS *Vincennes*, sprinted to the scene and engaged the Iranian fast boats. Against this heated backdrop, *Vincennes* confused ongoing intelligence reports of a taxiing Bandar Abbas-based F-14 with an inbound Iran Airbus, a passenger flight loaded with nearly 300 pilgrims on the journey to Mecca.⁵³

Already engrossed in the ongoing surface battle with the IRGCN fast boats, *Vincennes'* Commanding Officer, Captain Will Rodgers, began receiving incorrect reports of an inbound hostile F-14. A contact appeared on the ship's powerful SPY-1 radar and appeared to accelerate directly toward *Vincennes*, although gaining altitude. Rodgers waited until the last possible second to make the engagement, nearly exceeding the parameters of the Standard SM-2 SAM. *Vincennes* shot the large plane down with a single missile. A combination of poor training and an intimidating atmosphere of unquestioning deference to the Captain's orders contributed to the shoot-down. Within seconds, it was obvious the cruiser had made a terrible error.⁵⁴

The Airbus shoot-down, the devastating intensity of Iraq's new offensives (which included the heaviest use of chemical weapons to date), and heavy losses against the US Navy highlighted to Iran the grave risks of continuing the war. A peaceful solution to the new crisis with the US offered the possibility of new UN leverage over Iraq. Khomeini directed Rafsanjani to prepare a diplomatic response to the Airbus disaster to diffuse confrontation with the US.⁵⁵

Morale in both the IRGC and regular Iranian Army units were at an all-time low. Recently rearmed with its latest extended-range Scud missile, Iraq renewed the "War of the Cities." However, this time Tehran itself was the target. Directly attacked for the first time, Iran's capital city sank into lawless confusion. Worse yet, Iran had no missiles in its stockpile with which to reply. In addition to the new Scud attacks, Iran faced a new round of sanctions for refusing to accept UN ceasefire resolutions. Impacting Scuds in Tehran's most influential areas brought the costs of the War squarely home to Iran's elite.⁵⁶

Iran called for an emergency meeting of the UN Security Council on 5 July to discuss the Airbus incident and to protest Iraq's renewed use of chemical weapons. Iraq's reinvigorated chemical weapons attacks had been officially confirmed by UN Security Council Resolution 612 of 8 May 1988. Iran's call for this meeting was highly unusual. Since 1980, Iran had boycotted all of all Security Council meetings due to alleged anti-Iranian bias. During the meeting it was obvious that Iran was interested in a finding face-saving resolution of the war.⁵⁷

In secrecy, a conclave of Iran's military, political and theological elite met at the Presidential residence in Tehran to discuss the end of the war. The following day, 15 July 1988, an emergency meeting the Presidential Cabinet, attended by chairmen of important Majlis committees and chaired by Rafsanjani, endorsed these recommendations. On 16 July, following review and legal affirmation by the popularly elected Assembly of Experts (a constitutionally-specified body composed solely of clerics to advise the Supreme Leader), Rafsanjani presented a

ceasefire resolution to Khomeini. On 17 July 1988 Iran unconditionally accepted UNSC Resolution 598.⁵⁸

Two days later, Khomeini formally announced to the stunned Iranian people that he had accepted Security Council Resolution 598, which called for a ceasefire, "in the interest of the revolution and the system at this juncture." Thus ended a war that resulted in over a million casualties.⁵⁹

Conclusions: Fallout from the Iran-Iraq War, the Tanker War and Battle of the Frigates

Iraq's oil, its only significant source of foreign exchange, was Baghdad's SCOG during the war. Unfortunately for Iran, most Iraqi oil flowed to the West via an extensive pipeline network that ended on Turkey's Mediterranean coast. During the Iran-Iraq War, the overwhelming majority of Iraq's vital oil facilities were well out of the range of Iran's enfeebled Air Force. Although Iran could not directly tamper with Iraq's link to the West, Iran, using a sea denial strategy, could threaten the shipping of those states that supported Iraq.⁶⁰

In 1987, Iran expanded its sea denial capability with the Silkworm ASCM, achieving the capacity to threaten most Gulf shipping. This action dramatically raised the stakes for the West, and put enormous pressure on Iraq to decrease its attacks on Iran's more vulnerable oil facilities. Furthermore, the April 1988 destruction of the IIN's small frigate force within a few hours painfully reinforced to Iran's leaders that they were powerless to challenge the US Navy's sea control capability directly on the high seas.

In Iran's view, its mining and Tanker War campaigns, while not overwhelmingly successful in a Western sense, validated the Islamic Republic's strategy of sea denial. With relatively few older aircraft, modest investments in low technology mines, fast patrol boats, IRGCN special warfare training, and coastal ASCM cruise missiles, Iran had re-established itself

as the Gulf's preeminent naval power, second only to the US. Moreover, Iran accomplished this feat despite the ineffectiveness of the Shah's deteriorating weapons systems. By redefining the mission of its sea power forces from the unrealized sea control capability to the lesser, inherent sea denial capability, and by exploiting its geo-strategic position in the Gulf, Iran found an affordable key to protecting its SCOG.

Faithful to its new strategy of sea denial, Iranian arms purchases and training in the century last decade would focus on improving the same capabilities that were so successful during its war with Iraq. Iran's new hardware procurements (the subject of Chapter four) would include thousands of modern bottom mines, submarines, ASCM-armed fast patrol boats, and maritime strike aircraft.⁶¹

¹Limbert, 111.

²Ibid., 11.

³Ibid., 24.

⁴Ibid.

⁵Ibid., 42.

⁶Ibid., 47.

⁷Ibid., 49.

⁸Ibid.

⁹Efraim Karsh, *The Iran-Iraq War: A military Analysis*, The International Institute For Strategic Studies Adelphi papers , no. 220., (Dorchester, UK: Henery Ling, 1987), 46.

¹⁰Ibid.

¹¹This is the authors estimate based on analysis of the material researched in this thesis.

¹²Ted Hooton, "The Tanker War in the Gulf, 1984-88," *Jane's Intelligence Review*, May 1992, 4, no. 5, 218-221.

¹³Cheryl Benard and Khalilzad, *The Government of God: Iran's Islamic Republic*, (New York, NY: Columbia University Press, 1987, 118-119., Figure 5.2.; In the Islamic Republic the SCNS is chaired by the President and is composed of ten sitting members. These include two representatives of the Supreme Leader, the Head of the Judiciary, the Speaker of the Majlis, the Chief of General Staff, the Head of Plan and Budget Organization, and the Ministers of Foreign Affairs, Interior, and Intelligence and Security. The SCNS nominally determines domestic, foreign, and defense policy initiatives. Decisions made by the SCNS take effect only after approval of the Supreme Leader.

¹⁴Hiro, 129-131.

¹⁵Jordan, 214.

¹⁶Ted Hooton, "The Tanker War in the Gulf, 1984-88," *Jane's Intelligence Review*, May 1992, 4, no. 5, 218-221.

¹⁷Hooton, 218; "DOD Activities and Interests in Iran, Department of Defense, Confidential Report of 05 August 1975," E-24, figure 3, E-4.

¹⁸Hiro, 129.

¹⁹Ibid.

²⁰Tony Banks and James Bruce, "Iran Builds Its Strength," *Jane's Defense Weekly*, No. 5 - 1 February 1992, 158-159.

²¹Tony Banks and James Bruce, "Iran Builds Its Strength," *Jane's Defense Weekly*, No. 5 - 1 February 1992, 158-159.

²²"New Commander for Guard Corps Named," FBIS-NES-90-247 *Tehran IRNA in English*, 24 December 1990.

²³Hooton, 219.

²⁴Ibid.

²⁵Hiro, 130.

²⁶Hiro, 146.

²⁷Ibid.

²⁸United States Central Command, *1996 Middle East Posture Statement*., Hiro, 129.

²⁹Ibid.

³⁰United States Central Command, *1996 Middle East Posture Statement*, Hiro, 129.

³¹*Jane's Defense Weekly*, March 28, 1987, 352; Anthony Cordesman, *The Iran-Iraq War and Western Security 1984-1987*, (London, UK, The Royal United Services Institute, 1987), 135-140.; *Jane's Naval Weapon Systems*, August 1996, Issue 21.; *The Military Balance 1988-1989* (London, UK: International Institute for Strategic Studies, 1988), 125-134., Hiro, 187; *Jane's Defense Weekly*, March 28, 1987, 352, ; *Strategic Survey 1987-1988* (London, UK: International Institute for Strategic Studies, 1988), 101.

³²*New York Times*, 21 March 1987, 4, 24 March 1987, A-1.; *Washington Post*, 23 March 1987, A-19. Cordesman, 135-140.; *Jane's Naval Weapon Systems*, Issue 21.; *The Military Balance 1988-1989*, 125.; Hiro, 187.; *Jane's Defense Weekly*, March 28, 1987, 352.; *Strategic Survey 1987-1988*, 101.; President Reagan made the first statement on February 25, and this was followed by statements by Secretary Weinberger beginning March 22. The US released the details of the new Iranian missile built-up during the e month of March.

³³*The Iran-contra Affair: The Making of a Scandal, 1983-1988*, (Washington DC, The national Security Archives, 1990), 49-63.

³⁴*Strategic Survey 1987-1988*, 131.

³⁵*The military Balance 1987-1988*, 127.

³⁶Sharam Chubin and Charles Tip, *Iran and Iraq at War*, (London, UK, I.B. Tauris & Co. LTD), 1988, 224.

³⁷Hiro, 189.; Hooton, 220.

³⁸"Hashemi-Rafsanjani Vows Retaliation," FBIS-LD220827 *Tehran IRNA*, 22 September, 1987.; Hiro, 189.; Chubin and Tip, 217. "U.S. Military Leaders Prepare Plans for possible Retaliation," *The Washington Post*, 17 October 1987, A16.

³⁹Hiro, 190.; "Foreign Ministry Issues Statement," FBIS-LD221120 *Tehran Domestic Service in Persian*, 22 September, 1987.

⁴⁰*International Herald Tribune*, 11 October 1987, 1; "Iranian Silkworm missile hits US-Flagged Ship in Kuwait," *The Washington Post*, 17 October 1987, A16.

⁴¹"US Destroyers Shell Iranian Oil Platform in Gulf," *The Washington Post*, 20 October 1987, 1.

⁴²Hiro, 294.

⁴³"Reagan, Aids Weigh Response to damaging of Ship in Gulf," *The Washington Post*, 16 April 1988, 1.; Hiro, 203.

⁴⁴"U.S. Strikes 2 Iranian Oil Rigs and Hits 6 Warships in Battles Over mining Sea Lanes In Gulf," *The New York Times*, 19 April 1988, 1; Hiro, 204; "Reportage on U.S. Attacks on Oil Platforms," FBIS-LD180658 *Tehran INRA in English*, 18 April, 1988; "U.S.-Owned Oil Platform Attacked," FBIS-NC181052 *Paris AFP in English*, 18 April, 1988.

⁴⁵*Jane's Naval Weapon Systems*, August 1996, Issue 21; "U.S. Sinks 6 Iranian Ships in Gulf Battles," *The Washington Post*, 19 April 1988, 1.; Hiro, 204.; "U.S. Strikes 2 Iranian Oil Rigs and Hits 6 Warships in Battles Over mining Sea Lanes In Gulf," *The New York Times*, 19 April 1988, 1.; Hiro, 204.; "Reportage on U.S. Attacks on Oil Platforms," FBIS-LD180658 *Tehran INRA in English*, 18 April, 1988.; "U.S.-Owned Oil Platform Attacked," FBIS-NC181052 *Paris AFP in English*, 18 April, 1988.

⁴⁶*The Washington Post*, 19 April 1988, 1.; Hiro, 204.; *The New York Times*, 19 April 1988, 1; Hiro, 204.; FBIS-LD180658 *Tehran INRA in English*, 18 April, 1988.; FBIS-NC181052 *Paris AFP in English*, 18 April, 1988.

⁴⁷*Ibid.*

⁴⁸"U.S. Preventing Rescue," FBIS-LD182028 *Tehran IRNA in English*, 18 April, 1988; "U.S. Warned of Harsh Response," FBIS-LD181743 *Tehran Domestic Service*, 18 April, 1988; *The New York Times*, 19 April 1988.

⁴⁹"U.S. Sinks 6 Iranian Ships in Gulf Battles," *The Washington Post*, 19 April 1988, 1; Hiro, 204.

⁵⁰*The Guardian*, 20 April 1988, 1.

⁵¹"US Mission in Gulf Expands - President Orders Navy to Protect Neutral Shipping," *The Washington Post*, 30 April 1988, 1.

⁵²"New Iraqi Offensive in the Gulf," *The Times*, 06 July 1988, 1.

⁵³Hiro, 211.

⁵⁴AEGIS Officer Console Operator Course, S-2f-4641 Revision A (Washington DC; AEGIS Training Unit Wallops Is, 1994), 81

⁵⁵Hiro, 211

⁵⁶Al-Kawari, p.240; UN Security Council Resolution 588 was adopted 20 July 1987. The first two points listed in the operative text of the Resolution is as follows: "(The Security Council)

1. Demands that, as a first step towards a negotiated settlement, Iran and Iraq observe an immediate cease-fire, discontinue all military actions on land at sea and in the air, and withdraw all forces to the internationally recognized boundaries without delay;

2. Requests the Secretary-General to dispatch a team of United Nations observers to verify, confirm and supervise the cease-fire and withdrawal and further requests the Secretary-General to make the necessary arrangements in consultation with the Parties and to submit a report thereon to the Security Council."

⁵⁷Al-Kawari, 238; Hume, 147; UN Security Council Resolution 612 was adopted on 9 May 1988 based on an inquiry report dispatched by the Secretary General. The bulk of Resolution reads: "The Security Council,

Having considered the report of 25 April (S/19823) of the Mission dispatched by the Secretary-General to investigate allegations of the use of chemical weapons in the conflict between the Islamic Republic of Iran and Iraq.

Dismayed by the Mission's conclusions that chemical weapons continue to be used in the conflict and that their use had been on an even more intensive scale than before,

1. Affirms the urgent necessity of strict observance of the Protocol for the use of Asphyxiating, Poisonous or other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on 17 June 1925;

2. Condemns vigorously the continued use of chemical weapons in the conflict between Iran and Iraq contrary to the obligations under the Geneva Protocol;

3. Expects both sides to refrain from the future use of chemical weapons in accordance with their obligations under the Geneva Protocol."

⁵⁸Al-Kawari, 239; In its letter to the Secretary-General, Iran stated that the conflict, "... had now gained unprecedented dimensions, bringing other countries into the war and even engulfing innocent civilians. The killing of 290 innocent human beings, caused by the shooting down of an airbus aircraft of the Islamic Republic of Iran by one of the American warships in the Persian Gulf is a clear manifestation of this contention. ...

In this context we have decided to officially declare, that the Islamic Republic of Iran, because of the importance it attaches to the saving the lives of human beings and the establishment of justice and regional and international peace and security -- accepts Security Council Resolution 598.

⁵⁹Hiro, 242.

⁶⁰"Iran Re-builds its Air Force," London Financial Times, 8 February 1993, p.4.; Iran has since devoted a significant percentage of its scant resources to remedy this deficiency beginning the mid-1990s.

⁶¹Banks and Bruce, 159; James C. Bussert, "Iran Builds Its Strength," *Signal*, October 1996, 37-39.

CHAPTER 4

IRAN'S SEA DENIAL STRATEGY

Lessons Learned from the Gulf Wars--Rebuilding Iran's Strength and Iran's New NMS

Iran's sea denial strategy during the Iran-Iraq War set the course for Iran's current military buildup. Moreover, Iran has incorporated lessons learned from Iraq's experience during the 1991 Gulf War. Beginning in 1992, Iran's new national military strategy (NMS) focused on the development of two complementary strategic priorities to protect its SCOG. The first is the maturation of an integrated deterrent strategy (e.g., a state doesn't actually need to deny the use of seas, only to raise probable costs). This effort consumes the bulk of Iranian military resources and includes building on its potent sea denial capability to threaten Gulf shipping and close the SOH (already discussed at length in this paper), pursuing a credible weapons of mass destruction (WMD) program, developing an effective IADS to protect its periphery against air attack/counter-attack, and modernizing its ground forces to pose a creditable deterrent to Iraq.¹

The Islamic Republic's second strategic priority is the development of an offensive airpower capability with the capacity to strike targets as distant as Tel Aviv. Iran calculates that, eventually, this strategy will give it the option of a limited preemptive attack. Still incomplete because of aircraft acquisitions and pilot training deficiencies, the operational concept of the offensive airpower strategy centers on long-range bomber aircraft (Su-24 and Tu-22M) escorted by fourth generation fighters planes (Mig-29 and Su-27), aerial refueling, and AWACS for command and control. However, until more numerous and capable aircraft are acquired, and

given the robust capabilities of several Gulf air forces (e.g., the Royal Saudi Air Force), its offensive airpower strategy will be limited to countries with poor air defenses in the immediate Gulf region (e.g., Iraq).

Of particular note, in Iran's view, its WMD deterrent capability is central to the effectiveness of its overall NMS. Iran defines its WMD deterrent capability as the possession of a capacity to deliver an unacceptable quantity of WMD upon an opponent in retaliation for opponent's first WMD strike.²

In Iran's view, a nation could be relatively secure against deliberate WMD attack if it possesses this kind of deterrence. For example, if the IIAF hits Tel Aviv with a conventional air strike, Israel can only respond in kind (with its fighter bombers), eschewing a nuclear response because of the credible Iranian WMD capability. Iran therefore anticipates that in the future it will have the capacity to de-escalate or limit such conflict. Of particular significance for Iran, the 1991 Gulf War proved that, in engaging Western nations in battle, a state's possession of credible WMD are prerequisite rather than peripheral.³

Because of the immaturity of the Islamic Republic's WMD programs, the sea denial component of its deterrence regime is currently its only effective route to hegemony in the Gulf. Iran's Deputy Navy Commander, Rear Admiral Abbas Mohtaj, outlined Iran's sea denial strategy in a 12 December 1995 editorial letter to Tehran's English-language daily, *Kayhan International*:

Iran's military strategy is a defensive one, in keeping with its economic and cultural potential [Therefore], the Iranian Navy's new strategy [should enable it] to respond adequately to any future threat from Israel or the US. . . .

[The] new strategy includes an expansion and a modernization program that would empower the navy further and enhance its defense capabilities enabling it to cope successfully with any external threat.

Thus, Iran does not look only to the Persian Gulf as a place to play its role, but also the Oman sea and even the Indian Ocean. The construction of the Chah Bahar base and the purchase of submarines from Russia should be viewed in this context. . . .

No immediate threat is perceived from our neighbors as Iran's major rival, Iraq, is not in a position to threaten the more powerful and well-equipped Iran. At least in the immediate future, Iran has the best of relations with Pakistan and enjoys irreversibly good ties with Turkey. . . . There is no other country in the region that could be considered a threat. But there is a potential danger to Iran from more distant regions, this coming from Israel and the United States. Although the Iranian military leaders do not consider the Israeli threat of an air attack against Iran as real, preparations have been made to respond to any possible strike.

Although a military confrontation with the United States is only a remote possibility, naval and air forces would play the biggest role in confronting the Americans. [Consequently], to adequately respond to a US attack, Iran has to equip its Navy with modern radars and electronic systems as well as missiles. As a basic rule, there are ten factors that affect the outcome of a war . . . having more sophisticated weapons is only one such factor. Although the Iranian Navy enjoys superiority over the Americans in at least six or seven of these factors, it is doing all it can to improve its defense capabilities and increase its chances for superiority in the ten factors. It is also going ahead with its strategy to ensure Iran's leadership and superiority in the Persian Gulf.⁴

Iran's sea power forces (the IIN, IRGCN and IIAF) are clearly following the direction described by Rear Admiral Mohtaj, as evidenced by their arms acquisitions and training. Furthermore, the Islamic Republic aggressively began addressing its enormous military equipment incompatibility and parts support problems immediately after the Iran-Iraq War. Iran's former Defense Minister, Akbar Torkan, recently underscored this issue, describing Iran's procurement priorities as "The first priority is spare parts, the second priority is spare parts, the third priority is spare parts." In the same interview he also added, "Unfortunately, because our fleet is mainly made up of American products, providing spares is very difficult."⁵

Iran envisions equipment standardization as the main solution to the compatibility and supply difficulties it faced during the Iran-Iraq War. This standard is clearly Russian and Chinese, with an associated goal to produce as much as possible indigenously. Since 1990, Iran has built more than 250 major, state-owned plants, and now supports more than 12,000 privately-owned workshops devoted to military production. Iran negotiated with the Russian Federation for the right to assemble the MIG-29 fighter and to manufacture the T-72 tank. Iranian-built

T-72s will include an electronics suite and reactive armor similar to Iraq's T-80. Iran also produces, with Indian assistance, replacement batteries for its Kilo-class submarines.⁶

Iran's New Sea Denial Weapons

Iran's sea denial deterrent strategy drives six major programs. These systems include submarines, advanced technology mines, shore-based anti-ship cruise missiles (ASCM), missile-armed fast patrol boats, IRGCN anti-ship forces, and maritime strike aircraft.

Iran's Submarines

By early 1994, Iran's mini-submarines, acquired in 1988 from North Korea, had become increasingly unserviceable. Moreover, these tiny 27-ton vessels had a payload options of only two sidecar-mounted 5-ton cargo boxes or 14 limpet mines. Iran's minisubmarine limpet mines did not have a remote placement capability. This limitation forced the ship's small team of embarked IRGCN divers to exit the diving chamber and manually attach the cumbersome charges to the target. The IIN-IRGCN searched for nearly three years before finding a new minisubmarine contractor that was both willing to sell abroad and sufficiently influential to apply enough pressure on its government permit it to confront US policy. Cosmos S.P.A., the famous Italian submersible maker of World War II, rose to the challenge in October of 1996 and began negotiations for five 400-ton hulls. Barring further US pressure on Italy, Iran will probably take delivery of the first hull in late 1999.⁷

Iran's highest-profile submarine venture has been its Kilo-class submarine program. In past Gulf conflicts, submarine threats to Western naval forces were nonexistent. This environment changed dramatically when Iran ordered three diesel-powered Kilo-class boats from Russia for \$600 million each (because of delivery delays and additional crew proficiency training, Iran eventually paid \$750 million for the third boat). The first boat arrived in Iran in

November 1992, and the second Kilo pulled into Bandar Abbas 1st Naval District base piers in July 1993. Because of extensive US pressure to cancel the deal, Russia held up delivery of Iran's third Kilo until December 1996.⁸

Built by United Admiralty Shipyard in St. Petersburg, Iran's first Kilo, commissioned *Tareq-901*, completed crew shakedown training and basic tactical workups in the winter of 1992. In a demonstration of its concern over this development, the US sent the ultramodern fourth-generation Los Angeles-class submarine USS *Topeka* to shadow the new Iranian submarine during its initial operations in the Gulf of Oman.⁹

Because of its shallow depth and confused heat patterns, which make the performance of sonar operations nearly useless, the Gulf does not favor anti-ship submarine operations. Only one-third of the Gulf's narrow water area is deep enough to meet the Kilo's minimum submerged depth requirement of 100 feet. This fact alone will constrain its utility.¹⁰

The Straits of Hormuz (SOH) provides an even greater challenge to submarine operations. The SOH waterway is slightly under 100 nautical miles in length, but has minimum width of 20 nautical miles, and a single two nautical mile (nm) wide deep water channel (split into an inbound and outbound traffic separation scheme). Furthermore, the Gulf's limited flow of fresh water, and its high-evaporation component create extremely saline conditions that result in complex underwater currents in the main channel. While this makes submarine operations extremely difficult, it also makes antisubmarine acoustic detection of the submerged Kilos almost impossible. Iran clearly intends to operate its submarines in the Gulf and the Straits of Hormuz. As early as 1993, during a foreign media interview, the IIN's commander Rear Admiral Ali Shamkhani brushed aside claims that Iran's submarines were of no use in Persian Gulf waters, stating that, "they can operate not only in the Persian Gulf but also in any other waters."¹¹

Although Iran conducts low-level submarine crew proficiency training in the deeper Gulf of Oman and the North Arabian Sea, almost all advanced Kilo training and participation in the IIN's large joint exercises take place in the Gulf, the SOH, and its approach channels. Wartime deployment of the Kilo to the Gulf of Oman, or further out into the Indian Ocean, would put the US Navy's deadly 688-class submarine at a disadvantage. It is unlikely that they could survive for any length of time if hunted by the full range of the US Navy's undersea warfare systems (USW) including air-surface and US submarine hunter-killer teams, especially if hounded by the very effective S-3B Viking.¹²

Investing in Kilo submarines to support its sea denial mission, the IIN concentrates its Kilo training on mining and special forces operations. Iran communicates to its submarines using dipping sonars, and has recently improved its ability to use its submarines to provide surface ship tracking data to the 1st Naval District coordinated targeting team in Bandar Abbas. The targeting team uses submarine tracking data, together with data provided by shore based radar sites and patrol aircraft, to provide Iran's Silkworm and C802 ASCM missile batteries the best possible over-the-horizon-targeting (OTHT) picture.¹³

Although IIN Kilo integration in joint anti-shipping exercises is increasing, its main employment remains the independent deployment of naval mines (i.e., uncoordinated with other ships or aircraft). As part of the Kilo sales package, Iran received 1,800 modern KMD-series bottom influence mines, and UEP (underwater electric potential) moored and bottom mines. In early 1995, Iran bought a large number of Chinese-built MC52 rising mines. A reverse engineered version of the Russian KMD3000, the MC52 has a 250 kg rocket-powered warhead that races from the bottom toward detected targets at speeds over 100 knots. The MC52 is difficult to sweep, and triggers on a ship's magnetic, acoustic, pressure, or seismic signature that is created when a hull passes near the mine's sensors. The mine contains ship-counter-logic

(i.e., the ability to count individual numbers of ships), as well as acoustic discriminating circuits (i.e., basic ship type recognition), and functions in water up to 350 feet. The MC52 has excellent applications in the SOH, the western Gulf of Oman, and various Gulf harbors.¹⁴

Iran's Anti-Ship Cruise Missiles (ASCM)

The next star in Iran's sea denial pentagon is its shore-based cruise missiles. Despite its impending replacement by the more capable C802 system, Iran's Silkworm force still forms the backbone of its coastal-based anti-ship cruise missile capability. The HY-2 Silkworms are deployed to eight sites on the north side of the SOH, including sites at Chah Bahar Naval Base, Khuestak, Hormuz Island, Bandar Abbas, Queshim Island, and the IRGCN's newest sites at Abu Musa and Sirri Islands.¹⁵

Iran's acquisition of the Chinese-made C802 represents a dramatic increase in the IIN-IRGCN's ASCM capability. A reverse engineered Exocet, the C802 is very flexible and can be launched from land, ships, and aircraft. The C802 has a range of 38 nm in the surface-to-surface mode, uses a modern J-band (9-14 Ghz) radar seeker capable of discriminating chaff decoys, and can home on a ship's self-defense electronic jamming. Furthermore, it is likely that China transferred missile assembly equipment in mid-1995 to Iran to permit limited domestic production of the C802.¹⁶

Besides the C802, Iran is working on a WMD conversion variant of its aging HY-2 Silkworm missile. This new application uses the old HY-2 airframe and carries a very small WMD warhead, probably the nerve agent sarin or persistent 'V', supplied from Iran's massive post-war stockpiles. Moreover, because of its extremely limited payload (50-100 kg), the HY-2 WMD model could also contain the Islamic Republic's first biological warhead from its new Damghan WMD plant. However, because of its limited 250 nm range, a biologically-armed

HY-2 WMD would also raise the risk of biological agents affecting Iran. The missile's guidance system is still unknown. However, with Chinese help, it will presumably use some form of inertial navigation, or even carry a Global Positioning System (GPS) receiver.¹⁷

The Iranian Navy's newest ASCM system is the shore-launched variant of the Russian supersonic SS-N-22 Sunburn. In 1992, despite heavy US pressure, the Ukraine sold eight Sunburns to Iran for \$600,000 each. With a 55nm range, and a flight profile that exceeds mach 2.5, these missiles arrived in Bandar Abbas in May 1993.¹⁸

Fast Patrol Boats & IRGCN's Special Forces (SOF)

The IRGC's fast patrol boat (PTG) and special forces capability comprise the next pillar of Iran's sea denial strategy. The Naval branch of the IRGC possesses one of the largest naval special warfare capabilities of any maritime force in the world. The IRGCN operates most of Iran's PTGs as well as at least half of its HY-2 Silkworm ASCM sites. It currently operates more than thirty-five Swedish-built Improved Boghammer patrol boats (PB), and thirty-five to forty US-made Boston Whaler-type boats, and numerous Shah-era River Roadsted Patrol and Hovercraft (PBR).¹⁹

Ordered in 1983, and delivered (as previously discussed) under a ploy for Iran's Customs service, Boghammer Marine Ltd manufactured a total of 51 PB-class patrol boats for the IRGCN. The Boghammer is particularly important to IRGCN-IIN exercises and operations. It can reach speeds of up to 69 knots (depending on sea state and load), and has a range of up to 500 nm.²⁰

The Boghammers, and the IRGCN's other fast patrol boats (FPB), have very low profiles and are extremely difficult to detect by radar in sea states over five feet. The IRGCN bases FPBs at a number of offshore islands and oil platforms, and they can strike quickly and with limited

warning. There are key concentrations of FPBs at Farsi, Halul Island (actually a man-made oil platform), Sirri, Abu Musa, and Larak islands, and at the IRGCN's main base at Bandar Abbas Naval Base.²¹

The IRGCN also operates Iran's coastal artillery systems and has nearly two thousand qualified combat swimmers/divers (for comparison, the US Navy SEAL force numbers less than 1,400). To support this massive program, Iran has acquired extensive stockpiles of scuba equipment and maintains a large combat diver school in Bandar Abbas. Also located in the same building complex is the IRGCN's Underwater Combat Command. Using its SOF diver and FPB forces, Iran routinely exercises its clandestine insertion and M08 moored mine laying capability.²²

Complementary to the IRGCN's impressive FPB capability are the IIN's ten new Houdong-class missile boats (some reports suggest that the IRGCN may operate some of these ships). These potent 110 ft boats have a maximum speed of 35 kts, have a crew of thirty-one, and carry four potent C802 Eagle Strike missiles. Classified as Fast Attack Craft-Missile (FACM) boats, negotiations for acquisition of the boats started in mid-1995 but were held up by disagreements with the Chinese over the missile type. The Chinese, probably as a result of US pressure, wanted to equip Iran's Houdongs with the less capable C801. Iran made payment for the boats contingent on their armament with the C802. The Chinese eventually relented and delivered the first five boats in September 1994, followed by the second five in mid-1996.²³

Iran's Maritime Strike Air Force

Iran has successfully absorbed nearly all of the 145 aircraft received from Iraq during the 1991 Gulf War, following a nearly three year delay before attempting to integrate these sophisticated planes into its Air Force. Of key importance to Iranian sea denial deterrent

ambitions is the acquisition of fifty former Iraqi maritime strike capable Su-24 Fencers and AM-39 Exocet ASCM-equipped Mirage F-1s. This windfall provided the IIAF with dramatic improvements to its overall aircraft inventory and its training effectiveness since the early 1990s. The IIAF, at least on paper, is a much more capable force than that demonstrated during the Iran-Iraq War.²⁴

By late 1995, the IIAF's air and air defense forces, with more than 300 combat aircraft, had built back to a total of nearly 35,000 men from a low of 12,000 in 1989. The London-based International Institute for Strategic Studies (IISS) estimates Iran's offensive operational Air Forces (IIAF and IRGCAF) include twelve fighter ground-attack/maritime strike squadrons, with four squadrons (60 total) of F-4D/Es, four squadrons of (60 total) F-5E/Fs, two squadrons of (40 total) Su-24s, and two squadrons of 24 F-1s. Iran's air defense force consist of seven air defense squadrons, with single F-14 squadron of 15 aircraft, two squadrons of 30 MiG-29s, and one squadron of 25 Chinese made F-7Ms (a Mig-23 variant).²⁵

The IIAF's maritime strike role continues to expand. Although some IIAF ground attack squadrons undoubtedly pass through a dual qualification process (ground attack and maritime strike), there is considerable momentum to reassign the maritime strike role as a primary mission to some of Iran's established fighter squadrons. Specifically, this potential realignment includes all F-1s and at least one squadron of Su-24s. The IIAF recently acquired the several Russian built Tu-22M Backfire long-range bombers, which are designed for the maritime strike mission.²⁶

Iran's Su-24Ds are roughly equivalent to the US Air Force's recently retired F-111 fighter, but they have nearly one-third more wing loading and twice the thrust. With a typical 9,000-lb weapon load, the Su-24 has a combat radius ranging from 500 miles to 1,000 miles,

depending on its flight profile. With extra fuel tanks or airborne refueling, the Fencer can reach virtually any target in Iraq or the southern Gulf.²⁷

Iran's newly purchased Backfires arise from the diverse history of the Cold War. Created primarily to attack US carrier battle groups, the Tupolev design bureau rolled out the first supersonic Tu-22M Backfire in the mid-1970s. The Backfire also doubled as an excellent strategic bomber, rivaling the US Air Force's B-1. Although the Backfire performs superbly in this nuclear strike role (its unrefueled combat radius from Iran is sufficient to cover the entire Middle East, the Mediterranean and center of Europe), the Islamic Republic purchased this exceptional aircraft to perform its originally designed purpose of long-range maritime strike.²⁸

Iran's Sea Power Exercises

Iran vigorously exercises its sea power forces in sea denial roles. The most significant of these exercises are the bi-annual Victory series, and the semi-annual TM-73 events. The Victory series is by far the largest of its kind in the Gulf and consumes the preponderance of the training budgets of Iran's military services.

Victory-4, an intensive ten-day event in April 1993, was a completely integrated (although very scripted) joint exercise that included all regular and IRGC services. Speaking at a press conference a few days before the event, the Islamic Republic's senior military commanders stated that the vision for the exercise was to demonstrate "the readiness of the Islamic Republic's Armed Forces to defend the territorial integrity of the country under any circumstances."²⁹

Specific events included in Victory-4's serials featured surface and submarine naval, air and anti-ship cruise missile exercises as well as electronic warfare (communications jamming) and signals intelligence collection. Submarine and IRGCN fast boat operations concentrated on mining and coordinated maritime strike drills with shore based anti-ship cruise missiles. IIN

warships, the IIAF, and Army amphibious events concentrated on southern Gulf waters and littoral islands between Lavan and Nowruz oil field. With at least 36,000 personnel taking part in Victory-4, Iran's Islamic Army Chief, Major General Dadbin, stressed during a post-exercise brief that the exercise proved the inter-operability between Iran's military services and underscored that "the games are being jointly conducted by the Islamic Revolution Guards Corps (IRGC) and the Army."³⁰

Phase three of Victory-4 marked the exercise's final battle problem. Code-worded "Bushehr," this event originated in the northern Gulf and concentrated on the reconnaissance and engagement of a large opposition force at sea, as well as island defense. With waves of helicopter gunships and transports full of troops, the IIAF's airborne assault of Levan Island launched Victory-4's capstone event. On the beaches of Levan amphibious landings and "operations by frogmen" reinforced air assault troops. "Simultaneously, speed boats carrying the personnel also attacked the hypothetical enemy."³¹

Although Victory-4 included an amphibious assault, this exercise authenticated Iran's deterrent strategy of sea denial, confirming Iran's theoretical or potential capability to close the Straits of Hormuz and clearly demonstrating its fervent commitment to defend its contentious island holdings. Within three days of Victory-4's conclusion, Iran's Joint Staff began planning an exercise with Pakistan. Combined exercise coordination with Pakistani naval forces began in the Fall of 1993 and culminated in the visit of Iran's Naval Commander, Rear Admiral Ali Shamkhani, to Pakistan in January 1994. The highly publicized visit had a dual intent of pressuring further US reproachment on Pakistan's part, and conducting meetings with Pakistani Premier Benazir Bhutto.³²

During the Bhutto-Shamkhani meeting, the two leaders openly discussed closer military relations and "consolidation of ties" between the two countries. Of note, although Iran's Chief

of Joint Staff has always been an Army officer, the high profile given to Rear Admiral Shamkhani's visit implies the ascendancy of Iran's sea power forces within the Islamic Republic's power structure. Admiral Shamkhani "expressed satisfaction over the present political stability in Pakistan" in his final press statement of the visit. One indication of the importance of the visit is that Pakistan's Chief of Staff, General Abdelvahid, personally hosted almost every event.³³

The combined Iran-Pakistan sea power exercise, code-named Shahamat-73, began 20 February 1994. The fifteen day event opened in the North Arabian Sea off Pakistan's Karachi coast and was highlighted by a forced naval entry scenario through the Straits of Hormuz. Connected to Shahamat-73 was a series of events that stretched nearly 1,000 nm to the northern Gulf's Second Naval District and featured "tactical air and naval maneuvers that included air defense, electronic warfare and unspecified special operations."³⁴

Shortly after Shahamat-73's completion, Iran's forces began their semi-annual Fath (later titled TM-73) exercise series. A scaled down version of Victory, the normally six-day Fath rehearses command and control and inter-operability between naval, IRGC and regular Army ground forces. The spring 1994 Fath-3 event included "units from naval, air and ground forces...which is aimed at promoting the combat power of the forces."³⁵

Delayed until February 1995 because of funding constraints, the follow-on Fath serial, TM73-2, was a five day event that displayed IRGCN-IIN and Air Force coordinated anti-ship strikes using Iran's missile armed patrol boats as well as helicopter gunships and combat swimmers. Iran's official news agency, IRNA, quoted Iranian Navy Captain Gholamreza Masoumi, who commanded the exercise from 2nd Naval District Head Quarters at Bushehr, as saying, "several sophisticated vessels, including missile craft and fast attack craft, a large number of frogmen and Air Force aircraft took part in the maneuvers."³⁶

After nearly two years of planning, Victory-6 began only four months after TM73-2. Significantly scaled up from the 1993 event, the eight-day, four-phase Victory-6 accounted for over 50,000 ground troops, the entire IIN-IRGCN, and most of the IIAF. Further evidence of sea power ascendance in the Iranian strategy was the selection of Navy Commander Admiral Ali Shamkhani as the joint forces commander.³⁷

Integrated for the first time in any large Iranian joint exercise was the addition of defensive mine sweeping and coordinated search-and-rescue operations. With a dedicated mine warfare commander on the staff of the Joint Force Commander, Iran's RHM-53 helicopters and antiquated US-built minesweepers carried out coordinated mine clearing operations in the southern Gulf and managed to effectively demonstrate the employment of new European-manufactured (probably French and German) upgrades to their equipment. All mine operations were performed in Gulf waters. To underscore the scale of Iran's ground force participation in Victory-6, Admiral Shamkhani stated that, "some 31 out of the total 186 operations were carried out by the Iranian [ground] troops."³⁸

Phase 3 of Victory-6 included a massive amphibious assault. A 9 July 1995 IRNA news release described the event:

The third phase of the Victory-six military exercise of the navy in the Persian Gulf comprising amphibious operations, was carried out in the north [side] of the Persian Gulf successfully. In this phase of the maneuver, over 4,000 marines of the army and the Islamic Revolution's Guard Corps (IRGC) launched an offensive upon the hypothetical enemy and captured its target. In coordination with the troops, the jet fighters and bombers of the air force along with the gunboats raided the positions of the unreal enemy. The mission was carried out within the extent of 20 nautical miles. The reconnaissance operation was made by [RPV] pilotless airplanes. Infiltration of helicopters into the enemy's offshore positions, airborne operations and opening of operational canals [or, swept mine channels] in the sea were parts of the exercise.³⁹

Fath M73-3, renamed exercise Khaibar, followed Victory-6 in September of 1995. M73-3's label "Khaibar" commemorated Imam Ali Ibn Abi Talib's decisive seventh

century victory over tribes in northwestern Iran. The exercise was showcased by Iran's state media as the operational component of the Sacred Defense Week (22-29 September 1995) celebrations, marking the 15th anniversary of the "8-year Iraqi Aggression." Of interest, the term Khaibar was the code-name of a large amphibious operation launched in 1982 by Iran in the Majnoun Island region of Iraq's southern marshes. Khaibar, as with all Iranian joint exercises, focused on rapid closure of the Straits of Hormuz and the disruption of Gulf shipping. Khaibar also saw the first integrated use of Iran's ten new Houdong-class missile boats. Armed with four Chinese C802 cruise missiles, these potent 110 foot boats rehearsed coordinated tanker and warship attacks with Iran's new shore-launched C802 "Eagle Strike" batteries.⁴⁰ The exercise's capstone event featured a several kilometer-long pontoon bridge, built by Army engineers. The bridge, used to support reinforcement of a small amphibious assault, "served as a important springboard against the [hypothetical] enemy."⁴¹

Khaibar's successor exercise, M73-4, originally scheduled for the Spring of 1996, started on 25 November 1995. Although somewhat smaller, this event roughly paralleled M73-3 in substance except for an added new Caspian Sea scenario. Executed jointly with Iranian ground forces and the IIAF, this scenario focused exclusively on the defense of Iran's border.⁴²

Financial woes in the Summer of 1996 caused the cancellation of most Iranian sea power exercises. M73-5, Iran's most recent event, started in early December 1996 and resembled M73-4 in scope, although a live-fire C802 missile launch at a target barge in the Straits of Hormuz (SOH) generated great interest in the US Navy's Gulf-based Fifth Fleet.⁴³

Iran's sea power exercises clearly reflect the deterrent intent of its weapon acquisitions. Iran's exercises feature the closure of the SOH and the defense of its scattered Gulf islands. Iran's forces, although a credible threat to some GCC countries, still cannot not hope to seriously threaten those countries that have thrown their lot in with the West (for example Saudi Arabia).

Iran's amphibious forces, while large by Gulf standards, are incapable of sustaining a large operation on the southern side of the Gulf. Iran's landing craft, causeways and helicopters are very short ranged. The execution of a cross-Gulf assault, against Bahrain or Saudi Arabia for example, would require untested the requisite precursors for success (hydrographic beach reconnaissance and massive embarkation). These events should provide enough warning to enable GCC states, particularly with US assistance, to inflict horrific losses on Iran's amphibious forces. Moreover, given US Navy involvement in such a scenario, sustainment of the operation across the Gulf would be impossible.

Summary

This chapter establishes Iran's contemporary sea power strategy as a credible deterrent regime. Iran uses its forces both to defend its borders and to maintain a significant deterrent capability to close the Straits of Hormuz and to disable shipping in the Gulf and Gulf of Oman. Given Iran's own dependence on the Gulf, and its lack of a sea control capability, there are few plausible scenarios in which Iran would seek to stop Gulf navigation, or seize territory from Gulf Arab states. Thus, Iran's sea denial capability, while formidable, remains deterrence focused. Iran is more dependent on shipping than are all other Gulf states. Furthermore, good relations with Gulf states are critical to Iran's viability in OPEC. Chapter 5 of this paper will further establish that good Gulf relations are critical to the very survival of Iran's Islamic regime.

There is no reason to believe that Iran's sea power buildup will make it more likely to overestimate its capabilities or more disposed to use force. Iran's extensive number of small warships, patrol boats, land-based anti-ship missiles and submarines are physically limited to coastal defense and short range amphibious operations. Moreover, particularly since closure of the Straits of Hormuz and coastal defense are the heart of its current sea power training effort,

Iran is not capable of mounting an effective offensive sea power challenge to most Western powers. This is a critical factor supporting Iran's sea denial strategy for two related reasons: first, most Gulf states depend on the West for their security; and second, the US and other developed nations define the flow of reasonably priced oil as in their vital interests and would, therefore, use force to protect it.

¹Jane's Intelligence Review -- Special Report Number 6: Iran's Weapons of Mass Destruction, November 1995, 8-9.

²Ibid.

³John Strachey, *On The Prevention of War*, (New York; St. Martins Press, 1962), 58.

⁴"Iranian Navy should be able to respond to any future threat, "INRA Netiran English reprint of *Kayhan International*, 12 December 1995; RADM Mohtaj's comments regarding the ten factors that are needed for success in war did not specify what these factor were. The ten factors may be 'Clausewitzian' in nature, but this is only speculation.

⁵Cordesman, *Iran & Iraq: The Threat from the Northern Gulf*, p.55; *US Naval Institute database*, United Communications Group and the US Naval Institute Press, 1997.; David Segal, "The Iran -Iraq War: a Military Analysis," *Foreign Affairs*, Summer 1988, 951.; Arnold Beichman, "Arms and the Goals of Iran," *Washington Times*, 1 March 1992, B-3; "Military Intelligence Analysts at Odds with State Department over Iran War Scenario," *Inside the Air Force*, 28 February 1992, 1.; *London Financial Times*, 8 February 1993, 4; At the beginning of the Iran-Iraq War, the US, Britain and France made the overwhelming majority of Iranian military equipment. By the end of the war however, equipment from Sweden, China, North Korea, Russia, India several Eastern European countries, and Libya was common in each branch of the military and in the IRGC.

This equipment mix caused severe operational difficulties. Iran's attempt to provide replenishment ammunition to its armored ground forces epitomizes this pervasive obstacle in Iran's armed forces. By 1988, Iran's 1,040 tanks used seven different caliber of main gun ammunition. The task of supplying the correct caliber at the correct time and place, in sufficient quantities, to these weapons was daunting.

In an effort to solve this frustrating problem, Iran turned to Russia and China to buy most of its weapons. In the 1992 alone Iran bought from Russia more than 1,700 Soviet era T-55 and T-72 tanks, 15,000 multiple rocket launchers, 147 fighter and bomber aircraft, two submarines, and large numbers of surface-to-air missiles. China supplied Iran with guided missile patrol boats, shore batteries of advanced anti-ship cruise missiles, fighter planes, missiles, tanks, and multiple launch rocket systems.

⁶Tony Banks and James Bruce, "Iran Builds Its Strength," *Jane's Defense Weekly*, 17, no. 5, 1 February 1992, 158-159.

⁷Signal, 37; Cordesman, *Iran & Iraq: The Threat from the Northern Gulf*, 72.

⁸Miller, 43.; *Jane's Fighting Ships 1997*, (Thorton Heath, UK: Jane's Information Group, 1996), 319.; *Signal*, 37; Miller, 44; The Russian built Kilo is a relatively quiet modern submarine by Western standards. Iran's Kilos are the 877EKM export version of the Russian Navy variant and are about 30 feet longer than the original. and are equipped with the fairly effective MVU-110 fire control system that has the capability of tracking to attack two targets simultaneously. The MVU-110 also includes acoustic target motion analysis, narrow and broad band passive grams processing, and integrated low light television periscope features. 877EKM's hull has a smooth teardrop hull form coated with graphite-epoxy based rubber tiles. Designed to attenuate radiated noise from the ship's machinery spaces as well as absorb active acoustic energy from active enemy sonar the tiles form a complete anechoic coating around the hull. In truth, this system was so effectual that the US adopted the technology in the mid-1980s.

The 877EKM displaces 3,076-tons when submerged and 2,325-tons surfaced. It is 73.2 meters long, 10 meters in diameter and has a draft of 6.6 meters. Powered by a combination of three 1895 bhp generator sets and one 5,900 shp electric motor, The Kilo uses diesel-electric propulsion and is. Although very quiet the boat's six-blade propeller is a very quiet second-generation design, it is well behind US and Russian domestic fourth-generation blades. The ship sports six-bow mounted 53 centimeters torpedo tubes and carries twelve acoustic wake-homing, or wire guided TEST-71/96 torpedoes besides those loaded in its tubes. What is more important for Iran's application is the capacity to carry a flexible combination of thirty-four tube launched "swim-out" mines and a mixed load of self-defense torpedoes, although only two tubes of the export Kilo are configured to use the deadly E-53-60 wake-homing torpedo. Iran test-fired both wire guided and wake-homing torpedoes in the Gulf in November and December of 1994.

Iran's Kilos have a maximum surfaced speed of 10 knots and submerged speed of 17 knots. The submarines can dive to 300 meters, have a crew of forty-five, and a surfaced cruise range of 3,000-6,000 nautical miles depending on speed. With its advanced technology batteries, the 877EKM has an impressive average submerged range of 400 nautical miles depending on battery usage.

Besides this, the EKM's small size offers a significant advantage. The Gulf's 265 foot maximum depth, located 15 nm south of Qeys Island in the north-central Gulf, is less than the length of the US Navy's front line SSN-688 Los Angeles-class submarine. With no place in the Gulf deeper than its overall length, the SSN-688 has maneuver and bottom suction problems (a hydraulic vacuum effect that pulls a ship's hull closer to the bottom in very shallow water). The Los Angeles-class cannot hide in the thermoclines, or take advantage of deep diving for concealment or self-protection.

⁹David Miller, "Submarines in the Gulf," *Military Technology*, June 1993, 42-45. "Iran's New Submarines," *Defense News*, 17 February 1992, 1, "Submarine Showdown in the Gulf," *Defense News*, 1 March 1993, 1; "U.S. Submarines Show the Flag in the Gulf," *The Washington Times*, 16 January 1992, G-4.

¹⁰Hiro, map 5.

¹¹"Iran to hold Victory-4 Maneuvers in Persian Gulf," *INRA-NetIran in English*, 13 April 93, 1.

¹²"Naval Maneuvers Continue in Persian Gulf," FBIS-LD1304173096, *IRNA in English*, 13 April 1996.; "Naval Exercises Continue in Persian Gulf," FBIS-LD1404161496, *IRNA in English*, 14 April 1996.; "5-Day 'Khaiber-75 Maneuvers end in the Gulf," FBIS-LD2405152896, *IRNA in English*, 24 May 1996.; "Third Phase of Joint Exercise Completed," FBIS-LD2505113696, *Tehran Voice of the Islamic Republic of Iran First Program Network in Persian*, 25 May 1996.; "Naval Exercises Continue in Persian Gulf," FBIS-LD1404161496, *IRNA in English*, 14 April 1996.

¹³*Netiran-INRA, in English*, 13 April 93, 1.

¹³*The U.S. Navy 1995 Mine Warfare Plan*, (Washington DC, U.S. Government Printing Office, 1996), 44.

¹⁵*Signal*, 37; Hiro, map 5.

¹⁶Dr. Anoushiravan Ehteshami, "the Armed Forces of the Islamic Republic of Iran," *Jane's Intelligence Review*, February 1993, 76-79.; Paul Eddy, *War in the Falklands*, (London, UK; Harper & Row Publishers Inc., 1982), 156.; *Signal*, 38.; "Iran Increases Arms Supply," *Associated Press*, 31 January 1996, 1; Gordon Jacobs and Tim Mc Carthy, "China Missile Sales-Few Changes for the Future," *Jane's Intelligence Review*, December 1992, 559-563; In December 1995, Iran claimed to have tested a new missile developed by the IIN, (probably an Iranian assembled C802). Iran's weapons engineers successfully fired the new-sprung missile from Jask Naval Base at a target hulk in the SOH. A month later in late January 1996, the IIN tested a second missile from the same launch site. Reports indicated that this launch was another, possibly Iranian manufactured, C802.

Organizational integration of the C802 is still uncertain, although the IRGCN has stood up a training battery to assimilate the new missile and it is clear that the IIN is in charge of testing the system.

¹⁷*Jane's Intelligence Review -- Special Report Number 6: Iran's Weapons of Mass Destruction*, 16-22.; *Signal*, 38.; Mc Carthy, 560-561.

¹⁸*Signal*, 38.; Erick Arnett, *Sea-Launched Cruise Missiles and US Security*, (New York: Praeger Inc., 1992) 15-22.; Plaowski, 11-277; AEGIS (outline sheet T0010/7-1-3-1), 148-154. Erick Arnett, *Sea-Launched Cruise Missiles and US Security*, (New York: Praeger Inc., 1992) 15-22.; Plaowski, 11-277; AEGIS (outline sheet T0010/7-1-3-1), 148-154.; *Signal*, 38; The IIN-IRGC newest ASCM system is the Russian SS-N-22 Sunburn. Limitations in seeker head CPU memory capacity and slower internal processing speeds, made all Soviet technology ASCM missiles venerable to most sophisticated Western built electronic countermeasure equipment. Furthermore, the US Navy's newer surface-to-air missile systems, such as AEGIS and the MK-23 TAS radar-equipped RIM-7M Seasparrow system, achieved the capability to reliably shoot down supersonic ASCMs that their powerful electronic countermeasure (ECM) systems failed to decoy or jam. To meet this challenge, Russian engineers capitalized on their strengths and built a missile capable of speeds above Mach III. Traveling at velocities greater than 2,000 miles per hour the Sunburn's raw speed is able to overcome the detect-track-engage processing capacity of practically all Western hard-kill (nonelectronic) ASCM defense systems

It is no coincidence that the US Navy began immediate negotiations with Russia's largest missile producer, Raduga Ltd., manufacturer of the SS-N-22, to acquire Sunburn missile seekers. With hands-on analysis of the seeker head, engineers can quickly identify processor weakness and design appropriate ECM techniques (e.g., range gate pull-off, noise, radio frequency delay, etc.). The US navy also acquired complete Sunburn missiles and a shore-launch battery for 'hard kill' testing at the AEGIS missile test center at NASA's Wallops Island Virginia medium rocketry facility. Live fire Sunburn launches occurred in late 1995 and 1996. Test results remain classified.

¹⁹*Jane's Fighting Ships 1996*, 325.

²⁰*Jane's Fighting Ships 1996*, 325; For long distance movement, the IIN moves most Boghammers by amphibious lift to reduce wear on the IRGCN's scarce engine components. Beginning in 1991, Iran completed engine refit of a number of Boghammers and intends to conclude this overhaul schedule by 1997. The engine upgrade plan centers on replacement of the PBI's twin 714 bhp Volvo Penta TAMD71 diesels with two more powerful 1160 bhp Seatek 6-4V-9EA engines. Most IRGC Boghammer fast patrol boats carry a combination of heavy machine guns, grenade launchers, and an optional 106 meters recoilless rifle.

²¹Hiro, map 5.; *Jane's Fighting Ships 1996*, 325.

²²Erik Arnett, *Iran: Threat Perception and Military Confidence-Building Measures*, (Stockholm, Sweden: Stockholm International Peace Research Institute, 1996) 6; *Jane's Defense Weekly*, 11 July 1987, 15; Cordesman, *Iran & Iraq: The Threat from the Northern Gulf*, 75; Although partially merged with the IIN in 1989, the IRGCN maintains an independent command structure. Its bases and facilities, while often collocated with IIN units, remain under the distinct control of the IRGCN. Also supporting its separate self identity is its midshipmen training facility at the IRGCN's Noshahr Naval Academy on the Caspian Sea. Moreover, there is evidence that the IRGC has taken over the operation of the majority of IIN's aging US Built FPBs. These platforms include approximately 70 50 foot coastal patrol craft (PC) fabricated by Petersons Inc, six ex-US Navy Mk-II 50 foot PCs, and three ex-US Coast Guard 100-ton Cape-class gun armed patrol boats. The IRGCN operates Iran's only Soviet made OSA II-class missile armed patrol boat (received from Iraq in 1991 to escape the Gulf War). This small ship, designated PCFG-14, carried four of the 50 nm range Soviet built SS-N-2b ASCM. However, the HY-2 Silkworm is also completely compatible with the PCFG-14's Square Fire and four tube launchers. The IRGCN probably replaced its unserviced SS-N-2s with Silkworms.

²³"Choking the Strait--Iranian Naval Fire Power and the Threat to Gulf Shipping," *Jane's Intelligence Review*, September 1996, 411-414.; *Jane's Fighting Ships 1996*, 322.

²⁴*The Military Balance 1995-1996*, (London UK; The International Institute for Strategic Studies, 1995) 131-135.; *Strategic Survey 1993-1994*, (London UK; The International Institute for Strategic Studies, 1994), 140-143.

²⁵*The Military Balance 1995-1996*, (London UK; The International Institute for Strategic Studies, 1995) 131-135.; *Strategic Survey 1993-1994*, (London UK; The International Institute for Strategic Studies, 1994), 140-143; Of note, the IRGC Air Force (IRGCAF) is sharing in the Iraqi bonanza of sophisticated fighter planes. Analysts differ on whether or not the IRGCAF is organizing complete squadrons of aircraft or as merely as individual fighter crews in already established IIAF squadrons. In any case, the IRGCAF displayed former Iraqi fighters at the annual Tehran air show in 1996.

²⁶Peter Schweizer, "Terror: Tehran's Chief Export," *The American Legion*, March 1997, 26-29.; Cordesman, *Iran & Iraq: The Threat from the Northern Gulf*, 57.

²⁷"Russian Fencers for Sale," *Aviation Week and Space Technology*, 10 April 1989, 19-20; Plaowski, I110-I117; The Su-24 has a LO-LO-LO combat radius of 500 miles, and 1,000 mile LO-HI-LO range. LO equals low altitude, HI means high altitude. The Su-24 Fencer, as with all aircraft burns more fuel at lower altitudes because of atmospheric density. With extra fuel tanks or airborne refueling, the Fencer can reach virtually any target in Iraq or the Southern Gulf. Shortly after its Iraqi Fencer acquisition, Iran equipped the new fighter bombers with a variety of Russian supplied maritime strike capable missiles including the AS-9 Kyle, AS-11 Kilter and AS-14 Kedge. The 45 mile range AS-9 is an anti-radiation weapon with passive radar guidance and an active radar fuse. The AS-11 Kilter is a smaller but improved version of the AS-9 (carries a completely passive radar seeker), and has a range of 30 miles. Iran's AS-14 Kedge is a rocket assisted laser guided "smart" similar in capability to the US built Rockeye. The Kedge's range is only 8 miles and is best against defenseless targets, such as an oil tanker, because Fencer must stay bore sighted on the AS-14's target to maintain its laser guidance.

²⁸"Terror: Tehran's Chief Export," *The American Legion*, March 1997, 26-29; Cordesman, *Iran & Iraq: The Threat from the Northern Gulf*, 57; *Jane's All the World's Aircraft 1997*, (Thorton Heath, UK: Jane's Information Group, 1996), 442.; *Jane's All the World's Aircraft-Aircraft Weapons Systems*, (Thorton Heath, UK: Jane's Information Group, 1995), ASCM Appendix, 24-25; During the early 1960's it became clear to Russia's senior planners that the US's strategic concept for a non-nuclear NATO-Warsaw Pact conflict entailed a delaying action in Western Europe until the arrival of enough reinforcements from the continental United States could support a counter attack. To support this strategic delay, the US planned an immediate unilateral invasion of Russia's northern Kuril Islands and if successful, a follow-on assault on the Soviet mainland's Kamchatkan Peninsula. This event would divert Soviet forces to the eastern frontier and allowed the US time to bolster NATO's foothold in Europe. After US reinforcement, NATO would counter attack and eventually push Eastern Bloc forces eastward back across the "iron curtain" of the Internal German border (IGB).

The US fight in the Russian Far East was contingent on the power projection of the US Navy's Pacific Fleet carriers and USAF's Alaska based 11th and Guam stationed 13th Air Forces. To counter this airpower, the Soviets developed the long-range Mig-25 Foxbat interceptor and created the Soviet Pacific Naval Air Force's (PACOFAP) large stock of long-range maritime strike aircraft.

By the mid-1970s PACOFAP's aging maritime strike force could no longer compete with the US's increasingly modernized and growing carrier airpower in the northern Pacific. The Soviets closed this gap with the massive Backfire bomber.

Russia's Backfires first deployed to the remote air fields of the Soviet Far Eastern TVD (military district) in the early 1980s. The Tu-22s were replacements for the aging, but still in production, Tu-95 Bear-G and ancient Tu-16 Badger-C. Shortly after their arrival, the Pacific Fleet Air Force (PACOFAP) organized its Tu-22s into 10 maritime strike regiments of 18-22 aircraft; Backfire's attack profile was simple. Three or four regiments of aircraft would rocket south in loose formation under total radio-radar silence. Cued by constant "in the blind" broadcasts of targeting data from PACOFAP headquarters in Valdivostok, the Tu-22s attacked from an off axis direction (e.g., from the south or west), to the targets general location. The huge throng of supersonic bombers then turned on their sensitive Downbeat radars that could detect the American warships at nearly 200 nautical miles. After good radar lock at about 150 nm from the target, the planes let loose a hailstorm of over a hundred AS-4 Kitchen ASCM missiles.

The Kitchen, nearly the size of a small house, shot upward from its 36,000 feet launch altitude to its cruise height of 70,000 feet. Traveling in the thinnest margins of the atmosphere the AS-4 gradually picked up speed to its terminal velocity of nearly 2,000 miles per hour and then, roughly 20 miles from the target, made a climactic 45 degree dive toward the sprawling Carrier Task Forces. Even with the predicted 60 seconds of advanced warning, the Kitchen doomed the all but defenseless carrier. The Task Force's small handful of escort cruisers and destroyers could only fend for themselves and before the advent of the AEGIS air-defense system, even this was a slim hope. Indeed, if only 10 percent of the AS-4s got through the layered air defenses of the battle group, the Kitchen's 3,000 warhead was a devastating single hit kill and would result in the loss of several ships. Even if struck by some of the US Navy's advanced radar guided gatlin gun, the General dynamics built Vulcan Phalanx CIWS, the AS-4's massive airframe would send supersonic and still exploding shrapnel for miles

Clearly interested in the leveling opportunity that the Backfire represents, Iran will press for more Tu-22m air frames. Providing support to Iran's purchase of more Soviet weapons is Russia's debilitating financial instability and the lack of US financial incentives for Russia to check its arms sales. Russia will continue to offer Backfires and other sophisticated maritime strike aircraft on the international market at increasingly affordable prices. If Iran has the cash it will buy more Tu-22ms.

²⁹*INRA-NetIran in English*, 13 April 1993, 1.

³⁰*Ibid.*

³¹"3rd phase of Victory-4 Maneuver Launched," *INRA-NetIran in English*, 29 April 1993, 1.

³²"Navy Commander, Pak Premier Call for Consolidation of Ties," *INRA-Netiran in English*, 6 February 1994, 1.

³³*Ibid.*

³⁴"Iran and Pakistan Stage Joint Naval Maneuver," *INRA-Netiran in English*, 20 February 1994, 1.

35“Fath-3 Military Exercise Planned in Persian Gulf,” *INRA-Netiran in English*, 1 January 1994, 1.

36“Iran's Naval Units Launched Maneuvers,” *INRA-Netiran in English*, 04 February 1995, 1.

37“Mine Sweeping Operation Conducted During Victory Six Wargame,” *INRA-Netiran in English*, 4 July 1995, 1.

38“1st Stage of Victory Six Wargame Ends Successfully,” *INRA-Netiran in English*, 5 July 1995, 1.

39“Third Phase of Victory-six Navy Maneuver Ends,” *INRA-Netiran in English*, 9 July 1995, 1.

40“Persian Gulf-Maneuvers Khaibar Amphibious Maneuvers Underway in Persian Gulf,” *INRA-Netiran in English*, 23 September 1995, 1.

41Ibid.

42“Navy to Launch Two Maneuvers in Persian Gulf, Caspian Sea,” *INRA-Netiran in English*, 25 November 1995, 1.

43*INRA-Netiran in English*, 25 November 1995, 1.

CHAPTER 5

LIMITATIONS OF IRAN'S SEA DENIAL STRATEGY

The Political Setting

Chapters two, three and four concluded that Iran's sea power force structure is unmistakably deterrence-oriented with limited offensive capabilities. The purpose of this chapter is to provide further indications of Iran's deterrent-centered NMS by presenting evidence demonstrating that Iran's political, religious and socioeconomic structures drive the Islamic regime toward actions that support Gulf stability.

This chapter asserts that survival of the Islamic regime depends on Gulf stability. Moreover, that since Iran's sea denial capability, if actually used, would threaten Gulf stability, it must therefore be a deterrent. In turn, Iran uses the deterrent value of its sea denial capability as a source of its freedom to advance its vital interests: the protection of its strategic center of gravity--oil, and its ascendancy in the hierarchy of nations to a position of Gulf preeminence. Reciprocally, Iran believes that its ascendancy in the Gulf will give it more freedom to secure the Gulf stability requisite to better protection of its strategic center of gravity.

Chapter five describes the Islamic Republic's strategic decision-making processes, and details factors that limit the clerical leadership's freedom of action. The fragmentary nature of Iran's political system causes it to function on consensus, and the consequence of this effect is an inclination of the system, and consequently the regime's top leadership, toward moderation.

This chapter also outlines the tenuous legitimacy of Iran's Islamic regime in the eyes of Iran's overwhelming Shia Muslim majority, and that this factor limits disruptive actions (or the freedom) of Iran's leaders. This chapter additionally provides indications that Iran's collapsing socioeconomic system compels the Islamic Republic's leadership toward actions that directly support greater Gulf stability. Meaning, that because of Iran's precarious financial position, scenarios in which Gulf instability prevents Iran from exporting its oil will, eventually, lead to the downfall of the Islamic regime. Iran's leaders clearly understand this dilemma, and that such a downfall would not likely be bloodless.

Current US experience in the Gulf region stems from its recent conflicts with Iraq. The present focus on deterring Saddam Hussein's regional ambitions and the fear of historical antagonism with Iran, predispose many American policy makers to couple both countries as equal evils on the same Gulf stage. In the early 1990s, this rationalization gave rise to the US policy of "dual containment," or the coequal isolation of Iran and Iraq as a means to attenuate their regional ambitions.

Although it is true that Iran and Iraq represent the primary threats to Western interests in the Gulf region, to assess these very different states simply as the same danger is misleading. Although both nations may be politically hostile to their neighbors and the West in many of the same ways, political and ideological hostility does not inevitably lead to military action. This fact is particularly germane in the case of Iran.

In the post-Iran-Iraq War setting, Iran's militant revolutionary ideology, although often accompanied by vehement rhetoric, has not meant included willingness to engage in direct military confrontation. In spite of its aggressive talk, Iran seems less prone than Iraq to take risks.

Unlike Iraq's regime, Iran's current leadership is not monolithic or isolated from the majority of its citizens. Iran has become more pragmatic since the death of the Ayatollah Khomeini. Evidence of Iran's shift from ideological fervor to pragmatism has increased in the past few years and most recently surfaced in the political campaigns leading to the April 1996 elections of the new Majles, or parliament.¹ Increasingly, political leaders who adhere to an ideologically pure vision of Iran's future are becoming isolated from the mainstream by those who seek a more conventional, less revolutionary, role for Iran in the international community of nations. This force is even more evident in the leadership's drift away from the tenants of apostolic export of revolutionary Islam, and increasing respect for secular legitimacy. In a late February 1996 Tehran speech to foreign diplomats, Iran's increasingly pragmatic President Rafsanjani subtly underscored Iran's drift from its revolutionary doctrine stating,

The policy of non-intervention in other's affairs is among the basic and fundamental principles of the Islamic Republic's foreign policy. . . . Despite the enemies' extensive negative propaganda about Iran's efforts to export the revolution to other countries by interfering in their affairs, we deeply believe that the Islamic Revolution's principled thoughts and stands have many supporters among nations, especially in the Third World, and that this does not mean intervention in others affair's. . . . We believe that talks held in a friendly and peaceful atmosphere constitute the best way to solve regional differences and will prevent minor problems and differences from being transformed into violent and spiteful confrontations.²

Although this statement was carefully prepared for international political consumption, (Iran continues to support Hizbollah in southern Lebanon, and other radical Islamic fundamentalist groups such as Islamic-Jihad), it demonstrates a desire to moderate Iran's menacing international image.

Iran's recent history has been more subtle with fewer acts of open violence. Iran continues to seek greater economic ties with the West and even has sought to improve its diplomatic relations with the southern Gulf states. However, Iran continues to view itself as a revolutionary Islamic society and this self-perception often leads it to take extreme or radical

positions. It continues to condone some degree of political violence or 'terrorism' by other self-styled Islamic revolutionary groups, particularly by those that share Iran's ideology. When Iran has sought more amicable relations with its southern Gulf neighbors and the West, there have been riots, arrests, and assassinations indicating that the Iranian regime is still divided and by serious hard-line elements. In sum, because of the Islamic regime's adaptable political construct, and its responsiveness to the currents of Iran's convoluted socioeconomic forces, it vacillates between pragmatism and its revolutionary ideology.³

Contemporary Iran bears a tenuous air of openness. Public debate of social and political issues remained suppressed until the June 1989 death of Ayatollah Khomeini. Since then restrictions have lost their grip and once-forbidden issues are appearing in the spotlight of public debate. In early 1995, the *Payam-e-Emrooz* magazine published a special issue dedicated to US-Iran relations. The January 1996 issue of *Jame-e Salem* magazine printed a roundtable discussion of prominent intellectuals on the same topic, with the overwhelming majority of participants recommending the re-establishment of relations with the US. Recent issues of *Kiyan* magazine contain articles critical of the clergy's political role. Criticism of the government's economic policy and political orientation can be found in the *Asr-e-Ma* and *Iran-e-Farda* magazines. Perhaps most significant, the Iranian media widely report the volume of embezzlement scandals involving high-ranking government officials.⁴

The structure of the Iranian government is not a rigidly balanced power system, such as in the US, (with its definitive constitution and biblical US Code), but arises from multiple, autonomous, and often only loosely connected, power rings. While these power rings themselves are of a hierarchical structure, there is only minimum vertical relationship between them. This decentralized, quasi-feudal power system, which also extends into the economic realm, stems partially from the *ancien regime* of the Shah and usually takes the form of a

coalitions among congenial individuals or compatible groups, each with a slim margin of power. Personal and patrimonial patronage distinguish this quasi-feudal design. Leaders dispense senior posts exclusively to their immediate relatives and friends, who in turn appoint their own relatives and friends to sensitive positions. Even the government often finds itself at the mercy of such networks, which form inside and outside the formal government structure. Another characteristic feature of the Iranian political system is that prominent individuals are often more influential than their formal positions indicate.⁵

The dynamics of the Iranian political system operate on bonds of patronage and loyalty among individuals rather than on ideological, formal, or bureaucratic processes. The most powerful decision-making body incorporates a group of influential conservative clergymen. These senior clerics not only control the power ring around themselves but they also direct the system as a whole, functioning as the nation's strategic nerve center.

Senior officials and managers compose the next power ring. Outside this ring are forces with varying capabilities managing different sectors of the system. Among these are revolutionary foundations (bonyads), religious security forces, and members of the establishment, media and communication networks. Together they form the system's power base and propagate its ideology. A final, only loosely organized power ring, consists of individuals who formerly played a major role in the system. Although still very influential, these bygone elites now operate at the fringes of the system--on the borderline between state and civil society. In the March 1996 elections, members of this group entered the race as "independents," the "Islamic left," or various other political factions. Their considerable success in the elections demonstrates that this group is increasingly gaining political ground in Iran.⁶

Because of the second power ring's focal importance in the Islamic Republic, it is essential to understand the political dynamics within this group. This second ring of power splits

into two camps, pragmatic technocrats and religious traditionalists (the Heyatiis). These two groups differ radically in terms of their political and economic world view. Moreover, since the death of Ayatollah Khomeini in 1989, the political fault lines have fundamentally shifted. The current struggle is between technocrats rallying behind Rafsanjani, including Iran's new President Katani, and religious traditionalists led by former presidential favorite, the current Speaker of the Iranian Parliament, Nateq Nouri.

The traditionalist Heyatiis generally downplay the functions of management and scientific technology that are absolutely critical to the evolution of a modern developed state. This does not mean that they do not have educated members in their ranks or that they refuse the use of the scientific intelligentsia's expertise. It quite simply means that for them, education and professional competence are of mere secondary importance compared to traditional values and practices. In addition, traditionalists believe that the authority of the religious leader, currently Ayatollah Khomeini, transcends both the law and popular will. Business transactions among the Heyatiis proceed on the basis of personal trust and membership in traditional networks, and not necessarily on the basis of legally protected contracts. Heyatiis principally represent the interests of merchant capitalists, agricultural producers, and owners of real estate, groups that greatly benefit from the inefficiencies of the current economic system.

The Islamic system generally favors the Heyatiis, since it can identify itself with them. Yet, it is noteworthy that the Heyatiis themselves are gradually changing their position, and that many of them are currently reassessing their traditional values. This transformation will likely speed up as traditional forces begin to lose their former dominance in Iranian society. The Heyatiis divide on Iran's relations to the West. Some explicitly reject Westernization and modernity and support Iran's political isolation. Others advocate modernization, particularly the

use of advanced Western technology and a conditional integration into the internationally community.⁷

For technocrats, some of who are graduates of Western universities, the well-being of the state takes precedence over Islamic orthodoxy. Technocrats tend to be more pragmatic in their approach and more internationalist in outlook than their traditionalist rivals. Their conceptions of loyalty and effective group work also differ significantly from those of the Heyatiis. The technocrats focus on written laws and regard knowledge, science and education as core prerequisites for economic and political progress.⁸

Less engaged in the workings of the traditional system than the Heyatiis, the technocrats are unable to consolidate their position within Iran's decentralized power networks. In addition, members of the core power ring oppose the technocrats on parochial, power-political considerations. This failure, as well as the governments' insensitivity to their concerns has demoralized many of them. As a result, a considerable number of technocrats have left civil service and entered the private sector. Others have departed the country under the pretense of wanting to pursue their education or research abroad.

To a large extent, the concentration of political power in the hands of a few is the failure of the technocrats. Thus, the government's monopolization of power is a consequence of its inability to create a new responsible, effective and trustworthy elite prepared for accession to power. The problem here is a structural one: democratic societies produce future leaders through the competition within and among political parties.

In Iran, the Council of the Guardians, six voting clerics appointed by the Supreme Leader, and six non-voting lawyers appointed by the head of the Judiciary as confirmed by the Majles, has supervisory authority for all elections. The Council of the Guardians also screens potential candidates for "revolutionary correctness" typically approving slightly more than one

percent of new applications. Hence, lacks genuine political competition, the government has to recruit the new elite from outside the political system, from universities and loyal groups. A second reason for the system's incapacity to produce a capable technocratic elite is the lack of civil institutions within Iranian society. The government has tried to train a group of religious technocrats but this attempt has suffered from the inherent contradictions between traditional religious values and the imperatives of scientific and technological progress. Until its civil society is strengthened and politics liberalized, the Iranian power system is structurally incapable of producing or attracting innovative thinkers and competent technocrats.⁹

Iran's political elite operate on a carefully balanced (and closed) informal system of political patronage. In this system, domestic or diplomatic issues are resolved through a process of issue assessment, debate, and compromise. As a result, the system's natural consensus process tends to favor moderation.

Of particular importance in Iran's case is that moderate states historically center their NMS on deterrence vice offensive military power. This seems especially true for smaller states such as Iran.¹⁰ Accordingly, Iran's deterrent NMS of deterrent sea denial, limited self-defense and WMD, is not only compatible with, but is also partially the product of its political power system.

Iran's State Structure

Iran's ranking power ring, which has the major influence in both its domestic and foreign policies, is a religious oligarchy of intricate overlapping relationships among the leading clerics. They function in an exclusive, close-knit process of mutual loyalty and support. Although Iran's senior unofficial power ring propels its national policy, a discussion of how the

Iranian state's formal structures relate to its informal power networks is relevant to understanding how the Islamic Republic functions.

The Islamic Republic, following the death of its founder Ayatollah Khomeini, continues to be a autocracy; today, however, it is pluralistic one. The institutions formally charged with foreign policy formulation include the Supreme Council for National Security (SCNS), the Foreign Ministry, and the Foreign Affairs Committee of the Majles (which plays a marginal role). Iran's powerful quasi-governmental organizations, or "bonyads," especially the Foundation of the Oppressed, the Martyrs' Foundation, and the organization charged with the task of protecting the extensive government holdings in the province of Khorasan, are the preeminent interest groups influencing the foreign policy establishment.¹¹

The eleven member SCNS, chaired by President Rafsanjani, includes a diverse group of clerics, experienced diplomats, and top-ranking officers from the regular and IRGC militaries. The spiritual leader, and successor to Khomeini, Ayatollah Khamenei, has two representatives on the SCNS, one of whom, Hojjatolislam Rouhani, is the Council's Secretary and also serves as the Chair of the Majles' Foreign Affairs Committee. It is the task of the SCNS to forge consensus among the nation's fractious ruling elite. It generally does so by adopting policies that appeal to the lowest common denominator and are minimally acceptable to the predominant political players. Notwithstanding, such policies are vulnerable to resistant elements that have not participated in these decisions.¹²

Of note, there are few moderates in the Iranian ruling elite: all factions, including those identified with Rafsanjani, can rapidly switch from atonement to inflammatory rhetoric. However, this fact does not support the observation common among many senior Western leaders (including those in the US) that Iran has a unified and monolithic leadership. Each of

Iran's main political divisions (Heyatiis and technocrats) is further subdivided into three factions: radical, conservative, and pragmatist.¹³

The radical faction favors Khomeini's doctrine of "permanent revolution" and advocates direct support of Islamic movements abroad. Prior to Khomeini's death, Iran's foreign policy had been dominated by this faction. The radicals also favor strong state intervention in, and control of, the economy. This faction's key figures are largely isolated from institutional decision making, and this group plays no direct role in the official formulation of foreign policy. However, the radicals continue to wield considerable influence. The ouster of the radicals came about after the parliamentary elections of 1992, when many of them simply failed to win reelection. Others were "disqualified" from standing in elections by the Council of Guardians. Constitutionally empowered to evaluate the loyalty of prospective candidates, the Council of Guardians is the sentinel of Iran's highest power ring. The decision to bar many radicals from contesting the elections seems to have originated by the pragmatists, supported by the conservatives, and at least tacitly, by Khomeini.¹⁴

The pragmatic faction emerged in the late 1980s under the leadership of Rafsanjani. Drawing its main support from the technocrats, this group focuses on preservation of the current power structure through reinvigoration and modernization of Iran's crippled economy. They favor large scale privatization (except in the oil industry), subsidy reductions, and the imposition of a fully convertible currency. In the eyes of the pragmatists, economic rationalization (primarily through reduction of the state sector), and currency stability will encourage investors, both domestic and foreign, to infuse the Iranian economy. To accomplish the task, Rafsanjani and his associates realize that Iran's radical image requires improving its poor relations with the West through significant rapprochement. Therefore, the pragmatists favor a foreign policy that is less subordinate to hard-line ideological interests.¹⁵

Iran's third faction, the conservative element, opposes the pragmatists and the radicals. This bloc was ascendant in Iran's 1992 and 1996 elections. The conservatives derive support from various segments of the orthodox clergy as well as prominent members of the traditional middle class (the Bazaaris--merchants, artisans, skilled workers), and the heads of the economically powerful foundations. Within the last few years, the Bazaaris largely succeeded in derailing the pragmatists' economic reforms and intend to preserve the status quo, which is favorable to their interests. These conservatives seem to be particularly concerned with the regime's dwindling support in the ranks of its former proponents, the poor. The Bazaaris have therefore obstructed privatization efforts (viewed as particularly evil by the para-statal foundations) and have sought to placate the poor by increasing their state-accorded subsidies. The conservatives do not generally support the radical's partiality for an aggressive foreign policy, but being highly cautious in regard to social and cultural issues, they are not as enthusiastic as the pragmatists about strengthening ties to the West--especially with the US--fearing political fallout from the influx of Western values. They are astute to the lessons of the Pahlavi dynasty's collapse. As Iran's economy falters, Khamenei's pronouncements have increasingly taken a conservative tone, an indication that he is seeking to cultivate the support of this group in order to offset the potential vulnerability caused by perceived deficiencies in his religious credentials.¹⁶

Developments after the 1996 elections suggest that conservatives and pragmatists (from both the Heyatiis and technocrats groups) concur or agree on the need to prevent Iran from further international marginalization. The Islamic Republic's top power ring is desperately trying to break Iran from its US-led diplomatic isolation, because of its devastating effect on the country's already shattered economy. As evidence of this, two of Iran's leading conservatives publicly stated that the Islamic Republic does not, after all, intend to kill Salman Rushdie.¹⁷

Iran's Foreign Ministry recently issued similar statements, although Rasfanjani himself has not publicly concurred with these announcements. In a *New York Times* interview, the speaker of Iran's parliament, and then Presidential front runner Hojjatolislam Nateq-Nouri declared that, "We will never undertake the responsibility of killing [Rushdie]. . . . It is a religious verdict, not a political verdict. . . . if he were to die by himself that would be a good solution." In a similar policy shift, Iran's senior jurist, Ayatollah Mohammad Yazdi, also stated that Iranian courts "are not qualified" to enforce Ayatollah Khomeini's verdict against Rushdie.¹⁸

Other indications of conservative and pragmatist consensus stem from dampened reactions to events that normally inspire fiery rhetoric from the regime. In early May 1995, Indian troops stormed a Muslim shrine in Kashmir, killed dozens of Islamic dissidents, then tacitly stood by as an assembled Hindu mob demolished the fourteenth century structure. Instead of the normally bombastic fury and condemnation, Iran's foreign ministry officials responded with measured concern. The reaction of the Majles' conservative members was similarly lackluster.¹⁹

In sum, the fragmentary nature of Iran's power structures causes it to function on consensus. What is of particular relevance is that because of its consensus nature, Iran's political system, including the regime's top leadership, are predisposed toward moderation.

As already established, moderate states historically center their NMS on deterrence vice offensive military power. Accordingly, Iran's deterrent NMS of deterrent sea denial, limited self-defense and WMD, is not only compatible, but a direct product of its political power system.

The Islamic Republic's Relationship to Shia Islam

Related to the Iranian state's institutional inclination toward moderation is another factor that limits the freedom of action of Iran's leaders: the tenuous legitimacy of the Islamic regime

in the eyes of Iran's overwhelming Shia Muslim majority. Of significant importance, this determinant contributor to the regime's creep toward moderation, and lessens the voracity of its Gulf ambitions. The Islamic regime's ineptness in resolving Iran's mounting problems, almost all of which have been its own making, and its amazing facility in compounding those deficiencies, has resulted in the alienation of a vast proportion of the population from the state. Moreover, since Iran is, at least in theory, a theocracy--guided solely by God's law--many now view the system's weaknesses as caused by intrinsic shortcomings in Islam itself. Iranians with this view respond by abandoning or turning away from Islam, or they learn to mentally separate the reign of the politicized clerics from that of 'true' Islam. Each scenarios has potentially disastrous implications for the long term stability of the present system, particularly in light of the current spiritual leader's relatively meager credentials as a respected and learned religious guide.

The cornerstone of the Islamic Republic's present constitution is the concept of *velayat-e-faqih*, or guardianship of the jurist, a concept unique to Shia Islam. It legitimizes the role of the *faqih* (supreme interpreter of Islamic law, or jurisprudent) as the leader and safeguard of the people. As Ayatollah Khomeini put it, "In view of the fact that the government of Islam is the government of law [Islamic Law], only the jurisprudent . . . should be in charge of the government."²⁰

The *velayat-e-faqih* concept is a new, and somewhat unorthodox arrival, even in Shia thought. Adopted by Khomeini while in exile, no other grand al-ozma ayatollahs, except Ayatollah Montazeri, Khomeini's immediate successor until March 1989, had accepted, until recently, the *velayat-e-faqih*'s political-theological construct. They rejected it first because such a system seeks to transform Shiism from a faith open to multiple interpretations to a monolithic one. Furthermore, since the mid-1500s, Iranian Shiism discouraged the direct participation of

clerics in political affairs on the grounds that it denigrated Islam's prestige. However, Khomeini managed to temporarily legitimize the institution of *faqih* by virtue of his irresistible charisma, impeccable educational and religious credentials, and his omnipotent stature as the leader who united all elements opposed to the Shah in what at the time was a popular revolution.²¹

It is absolutely critical to bear in mind that the institutionalization of *faqih*, and accordingly, the very foundation of the regime, derived legitimacy from Khomeini himself, rather than the other way around. No in Iran today is capable of filling Khomeini's role; furthermore, the present spiritual leader, "Ayatollah" Seyyed Ali Khamenei, holds none of his predecessor's qualifications. Promoted to the rank of ayatollah after his assignment as the *faqih*, Khamenei's advancement is in violation of the well-established Shia academic standards; clearly, his theological achievements are too feeble to qualify him as an ayatollah, let alone a grand ayatollah. Moreover, because of his young age, junior canonical rank and his mediocre prestige in the religious hierarchy, he concedes that he cannot act as an example for emulation by Iranians--thereby effectively separating, contrary to Khomeini's initial formulations, religious from political leadership. Clearly not institutionalized in Iran, the *faqih* doctrine is rapidly eroding.²²

With the legitimacy of the regime increasingly in peril, even politicized clerics continue to call for a partial retreat from power. In 1994, a prominent ayatollah, Mohammad Reza Mahdavi-Kani, the Secretary General of Tehran's Combatant Clerics Association, declared that Iran's next president should not be a cleric. His warning that the mullahs should distance themselves from routine day-to-day government tasks is significant, not only because of its implied admission that the revolution is in serious trouble, but also because at present all key decision-makers are members of a fraternal organization that Mahdavi-Kani led until his July 1995 resignation.²³

Other clerics have gone even further with these pronouncements. Abdulkarim Soroush, a renowned revolutionary Islamic philosopher, maintains that clerics should serve solely as spiritual leaders. Soroush recently stated, "The business of religion should be strictly religion." Iran's grand ayatollahs embrace such views. Furthermore, these beliefs are increasingly popular among the younger generation of seminary students, and the "computer mullahs." If the regime manages to survive, these individuals may eventually be the ones that transform it. Iran's politicized clerics have apparently come to the realization that the greatest challenge to the survival of their system comes from the doctrines of Soroush and the swelling ranks of his followers, since they confront the regime from the religious "high ground."²⁴

On the whole, the increasing erosion of the Islamic regime's legitimacy mollifies its actions at home and in the Gulf. A growing number of Iran's clerical establishment will increasingly realize that any increase in Gulf instability will eventually bring more hardships on the Iranian people, and by consequence raise domestic hostility toward the regime.

Iran's Collapsing Socioeconomic Structures

In addition to the deterrent focus of its military and the political power system's inclination toward moderation and the direct support of Gulf stability, the third factor that drives Iran toward moderation is the Islamic Republic's deteriorating economic state and impending socioeconomic crisis. Besides gross mismanagement and pervasive government corruption, the most operative forces behind Iran's distressed economy are the US led-trade sanctions, and most importantly, Iran's exploding population.

The US relies primarily on its trade sanctions on Iran to cause changes in the Islamic Republic's current international behavior (e.g., state supported terrorism), to reduce its arms

buildup, and to improve Iran's domestic human rights. The State Department outlined US foreign policy goals for Iran in a recent press statement.

From our view, the normalization of relations with Iran depends on several factors. Iran's role in sponsoring terrorism continues in ways that are deeply disturbing. Iran's human rights practices, and its apparent pursuit of a destabilizing arms buildup, including everything from submarines to weapons of mass destruction, also remain matters of serious concern. Further, Iran's policies toward the Gulf Arab states, as exemplified by its heavy-handed assertion of authority on Abu Musa island, have shown it to be an increasingly truculent neighbor. We welcome the firm stand that the Gulf Cooperation Council has taken on this issue. Another serious problem is Iran's categorical opposition to the Arab-Israeli peace process, and its support for those, like Hizballah in Lebanon, who violently oppose it.²⁵

After the original imposition and later tightening of economic sanctions on Iran, most analysts thought they would have no effect because the Islamic Republic would simply turn to other trading partners in place of the US. However, the US-led embargo costs Iran tens of millions of dollars per day in 1997. In truth, they have reduced Iran's monthly foreign exchange receipts by \$1-2 billion per month--much more than initially expected. The sanctions have forced Iran to pay higher prices for imports, accept lower prices for exports, and, especially, make do without foreign investment and loans. The biggest impact has come in four areas.²⁶

The first area to feel a major impact from US sanctions is Iran's oil exports. Iran's official Islamic Republic News Agency (IRNA) admitted in August 1995 that Iran had not been able to market 200,000 barrels a day that, prior to sanctions, American companies had always bought. While Iran eventually found markets for all the oil, it lost about \$300 million during the transition. There is overwhelming evidence that sanctions, particularly the US ban on American companies from purchasing Iranian oil, force Tehran to sell oil at a significant discount.²⁷

Domestic oil production is the second area impacted by economic sanction. Iran pays tens of millions of dollars a year more to get parts for its old US-built equipment. More significantly, the Islamic Republic has not been able to attract the foreign investments that were

(and are) crucial to its plans for increasing oil earnings. A November 1995 Tehran conference to allure potential oil and gas investors was a disaster, with not a single deal materializing. Even Lukoil, a Russian firm, backed out in response to intense US pressure.²⁸

Business confidence is the next domain affected by US pressure. The imposition of sanctions by the US triggered a run on the Iranian currency. The 1996 Iran-Libya Sanctions Act, which severely restricts new direct US investment in Iran, also penalizes foreign companies with US subsidiaries that trade with Iran. Individual contracts for these corporations are limited to \$40 million, a relatively insignificant sum for most international transactions. One week after the Clinton administration imposed the sanctions, the Iranian currency lost one-third its value, falling from 4,000 rials to the dollar to 5,500. Tehran responded by slapping on rigid controls and setting an artificial exchange rate of 3,000 rials to the dollar. This intervention caused the money supply to dry up, and drove the economy deeper into recession. The reason for the run on the currency was simple: US sanctions scared Iranian executives. They worried about what would come next if Tehran persisted in its collision course with the US.²⁹

Iran's increasingly restricted access to foreign capital is final impediment exacted by economic sanctions. Foreign lenders are more cautious about dealing with Iran because of severe financial penalties detailed in Executive Order 12959 of 6 May 1995 and later in the 1996 Iran-Libya Sanctions Act. Iran only has been able to arrange one large loan package (for \$675 million from BHF, a German bank), and even that depends upon the uncertain prospects that the German government will guarantee the loan. Meanwhile, Iran's burgeoning debt continues to force the Islamic Republic's Finance Ministry to give top priority to repaying its foreign debt quickly. Iran went from being a net borrower of about \$5 billion a year during 1990-93 to being a net repayer of about \$5 billion a year by 1995. The \$10 billion turnaround in foreign borrowing forced Iran to cut its imports from \$24 billion in 1993 to \$12 billion in 1995. Iran's

accelerating economic spiral has hit the middle income *Bazaaris* and technocrats hard. It is not that they are going to starve or go without medicine, but they are making do with many fewer new cars and television sets. Factories have run out of imported material and spare parts. Economic growth has stopped because there is little investment.³⁰

Many of Iran's economic problems are due to inappropriate economic policies and inefficient central planning. Tehran wasted nearly all borrowed money and would not have been able to make regular debt payments even without US pressure. Still, the sanctions have made Iran's economic situation worse. US policy-makers were fully aware of Iran's extraordinary economic vulnerabilities well before the implementation of sanctions. In his November 1995 testimony before the House International Relations Committee, Under Secretary of State for Political Affairs, Peter Tarnoff, carefully mapped this strategy:

By pressuring Iran's economy, we seek to limit the government's finances and thereby constrict Tehran's ability to fund rogue activities. We launched an initiative to block Iran's access to the international capital its economy needs. We have worked bilaterally and with the international financial institutions to keep other governments from providing Iran with credit . . . with these efforts, we are taking advantage of Iran's economic vulnerabilities, particularly its shortages in hard currency. We recognize that economic pressure takes time, but we are convinced that making Iran pay a price for its unacceptable activities is the best way to convince the Iranian leadership that it is in their country's best interest to abandon these policies.³¹

Official estimates place Iran's foreign debt at \$32 billion. Japanese and European firms hold notes for most of Iran's international financial obligations. About \$12 billion of this debt came due in 1995 and Iran's lack of resources compelled it to refinance this enormous amount at very unfavorable terms. US pressure prevented the Islamic regime from arranging multilateral rescheduling through the Paris Club of bankers; consequently, Iran had to negotiate nineteen separate debt agreements. This burden has had distressing implications for its fragile economy. Iran was required to repay \$4.5 billion in 1996 and must repay \$7 billion in 1997 (nearly half of its projected oil revenue).³²

Iran's population explosion is a ponderous burden and is likely to present the regime with even more harmful consequences in the future. Most of Iran's swelling population (which increased by 40 percent in the last twenty years) has joined the ranks of the destitute in the country's sprawling cities. Shortages and the failure of the government to meet fundamental needs continue to spark spontaneous uprising. The current unemployment rate for those fifteen to twenty-four is 40 percent. Although the older adult average is only half of this number, 60 percent of Iran's population is under eighteen and the country has illiteracy rates nearing 70 percent. Significantly, the vast majority of Iran's population has no direct personal knowledge of the deprivations and repressions of the Shah's regime that the Islamic Republic was to have resolved. For this group, attempts to blame others for the faults of the Islamic Republic ring hollow. Unemployment figures will certainly get worse; even if the economy were to go through a miraculous recovery, it would be hard pressed to find gainful employment for such an immense surge of young people looking for jobs or higher education. As for attendance at Iran's universities, presently less than one-tenth of qualified applicants are able to do so.³³

The mismanagement of the Iranian economy, population explosion, and enormous cost of the devastating Iran-Iraq War (\$650 billion according to some estimates) have pauperized Iran's population. The latest available statistics suggest that during the period of 1978 to 1990, per capital income dropped nearly 45 percent. According to one estimate, absolute poverty has spread to 75 percent of the population by 1988 and this figure is certainly higher now, nearly a decade later.³⁴

In sum, the immutable dispossession of the Iranian people further threatens the stability of the Islamic regime. Actions taken by Iran's leadership, such as military adventurism, overt terrorism, or a significant increase in its inflammatory rhetoric, will further affect Iran's oil revenues, compound domestic unrest, and could potentially cause the regime's downfall. It is

important to note that, in view of the increased separation of politicized clerics from more theologically competent clergymen, and the widening criticisms of their culpability in creating Iran's economic problems, a collapse of Iran's power system would be far from bloodless. Because the current regime has a vested interest in stabilizing Iran's tottering economic stability, it should be expected that it will quietly avoid actions that upset this tenuous balance.

Summary

This chapter provided evidence demonstrating that Iran's political, religious and socioeconomic structures limits the freedom of action of Iran's leaders and drives the Islamic regime toward actions which support Gulf stability, and that in strategic terms this is translated into a deterrent NMS composed of a sea denial strategy, acquisition of weapons of mass destruction, and ultimately Iran's Gulf preeminence.

Nevertheless, Iran remains an ambitious power in terms of status, and in doing so its policies have been characteristically erratic. The Islamic Republic's view, its quest for preeminence in the Gulf is the only way to provide the Gulf stability that is absolutely essential to the protection of Iran's economic lifeline and its strategic center of gravity--oil.

With increasing economic difficulties there is a danger that Iran may become politically volatile as well; that the Islamic regime, unable to resist temptation, will use a foreign adventure to distract its dissatisfied populace. Clearly, such a scenario would capitalize on one of Islamic Republic's perceived strengths--that Iran thrives on adversity. However, many observers believe that this strength has atrophied; that Iranians are no longer in the mood for crusades or sacrifices except, possibly, in reaction to a clear and present danger to the homeland.

A more likely scenario for the Islamic regime, is increased dependence on internal security forces for repression of political dissent. In the process, further strengthening of IRGC ground forces should be expected.

¹*Strategic Survey 1995-1996*. (London, 1996), 7.

²"Reports on Rafsanjani Remarks to Foreign Diplomats," FBIS-NC092091196. (*Tehran Voice of the Islamic Republic of Iran, First Program Network in Persian*, February 1996).

³Edward Shirley, "Fundamentalism in Power; Is Iran's Present Algeria's Future?," (*Foreign Affairs*, May/June 1995), 36.

⁴Dr. Hooshang Amirhamadi. "Emerging Civil Society in Iran," (*SAIS Review*, 16, no. 2, 1996), 89.

⁵Benard and Khalizad. *The Government of God: Iran's Islamic Republic*, (New York, 1984), 120.; Joffe, George. "Iran - Tearing Itself Apart?," (*Jane's Intelligence Review*, October 1995, 7, no. 10), 448.

⁶Amirhamadi, 91.

⁷Peter Avery, "Balancing Factors in Irano Islamic Politics and Society," (*The Middle East Journal*, Spring 1996, 50 no. 2), 190.

⁸Peter Avery, "Balancing Factors in Irano Islamic Politics and Society," (*The Middle East Journal*, Spring 1996, 50 no. 2), 190.

⁹*Ibid.*, 191.

¹⁰John Strachey, *On The Prevention of War*. (New York; St Martin's Press, 1962), 68-72.

¹¹Farzin Sabari, "the Post-Khomeini Era in Iran," *The Middle East Journal*, Winter 1994, 89-107.

¹²*Ibid.*, 90.

¹³"From Tehran to Waco: Rafsanjani Talks Tough on Clinton," *Washington Post*, 9 July 1995, c-3.; Sabari, 94.

¹⁴Anoushiravan Ehteshami, *After Kohmeini*, (London UK: Routledge, 1995) 20 (243); The radical faction is represented by key figures such as Ali Akbar Mohtashami, Hojjatolislam Karrubi, Mohammad Khoini'a, and Mousavi Ardebili. They have been largely purged from institutional decision making and this group plays no direct role in the official formulation of foreign policy.

¹⁵Dariush Zahedi and Ahmad Ghoreishi, "Iran's Security Concerns in the Persian Gulf," *Naval War College Review*, Summer 1996, 86-87.

¹⁶*Ibid.*, 87.

¹⁷Rushdie, author of the book, *The Satanic Verses*, which was alleged heretical to Islam by Iran's Judiciary, was sentenced to death in absentia by Ayatollah Khomeini.

¹⁸"President Comments on Rushdie Affair," *Iran Times*, in English, 2 June 1995, 1; David E. Sanger, "Fear, Inflation and Graft Feed Disillusion among Iranians," *New York Times*, 30 May 1995, A-6; Vahe Petrossian, "Iran: US Announces Total Trade Ban to Mixed International Reception," *Middle East Economic Digest*, 12 May 1995, 25.

¹⁹"Tragedy in Kashmir," *Iran Times*, in English, 12 May 1995, 15.; Dariush Zahedi and Ahmad Ghoreishi, 88.

²⁰Edward G. Shirley, "The Iran Policy Trap," *Foreign Policy*, Fall 1994, 84-85.

²¹Moshen Milani, "the Transformation of the Velayat-e-Faqih Institution: From Khomeini to Khomeini," *the Moslem World*, July-October 1992, 189.

²²*Ibid.*, 190.

²³Edward G. Shirley, "Iran's Present Algeria's Future?" *Foreign Affairs*, May-June 1995, 39.

²⁴Katayoun Ghazi, "From Friday Prayers to Video Nights," *New York Times*, 18 February 1995, A-4.

²⁵"US Policy Goals in the Near East," *US State Department Dispatch*, 14 September 1992, 3, no. 37, 701.

²⁶*The Middle East and North Africa*, (London UK: Europa Publications Ltd., 1997), 442-447.

²⁷Patrick Clawson, "Can we coexist with Iran?," *USA Today*, 11 March 1997, 14-17.

²⁸*Ibid.*, 15.

²⁹*Ibid.*, 16.

³⁰*The Middle East and North Africa*, 445.

³¹"Containing Iran," *US State Department Dispatch*, 13 November 1995, 6, no. 46., 832-834.

³²"Tied Economy, Tied President," *The Economist*, 16 July 1994, 37-38.; Peter Waldman , "the Iranian Economy Takes Another Turn, But Where Is It Going ?", *The Wall Street Journal*, 11 May 1995, A-10.

³³Ali Benuazizi, "Iran's Revolutionary Impasse: Political Factionalism and Societal Resistance," *Middle East Report*, November-December 1994, 6.

³⁴Ehteshami, 100.; Hushang Zamirahmadi, *Modern Capitalism and Islamic Ideology in Iran*, (New York: St. Martin's Press, 1992), 260-262.

CHAPTER 6

CONCLUSIONS

All states operate in an international system in which each looks after its own particular security interest. Small states, such as Iran, have difficulties meeting challenges from larger powers or power blocs since, by definition, small states do not have the capacity to build military forces capable of challenging potential opponents. Generally, small states have little leeway; their military and diplomatic margins are thin. A few small states, such as Switzerland and Sweden, adopt postures of self-reliance, attempting to meet security challenges without outside help. These states, normally highly developed countries, internally balance security needs with other domestic resource demands such as social programs. Other small states solve this problem by participating in alliances with other countries. This external balancing approach mobilizes the power of other states to protect the small state's security interests. Alliances, however, normally constrain a state's freedom of action. Small states are also constrained by the prevailing international security system and regional subsystems. Most small states attempt to devise strategic doctrines based on a mix of external and internal balancing to maximize power and the freedom of action to use it. Iran is an example of such a state.

To protect its SCOG, Iran historically has pursued efforts to internally balance the construction of a significant military capability as well as to externally balance its security needs through the establishment of a Gulf regional security system (e.g., a CENTO-type alliance) under Iranian leadership. Although partially isolated today because of its ideological demands for

freedom of action, the Islamic Republic's "mutual security" overtures to states, such as Pakistan and Oman, reflect the consistency of this approach.

With the collapse of superpower competition in the Middle East, and as a result of Iraq's military defeat in the 1991 Gulf War, Iran has greater latitude in pursuing its historic quest for SCOG security. Moreover, Iran has learned the appropriate lessons from its war with Iraq and from the Gulf War. These lessons separate into two categories. First, it is imprudent to directly challenge the West's overwhelming strength in military technology; conventional defense against this critical advantage is impracticable. Second, efficiencies are possible in areas where the defensive technology lags behind lower technology offensive systems. For example, in one hour a minelaying ship with a trained crew could lay ten low-technology M-08 mines, spaced at a moderate 200 yard interval, across the Straits of Hormuz deep water channel, thereby denying the Straits to 10.8 meter-draft supertankers. Conversely, sweeping that same minefield with the latest technology mine-countermeasures ships would take several days in the best weather, and weeks in poor weather.

Historically, Iran's NMS has focused on two objectives: first, the defense of Iran's oil production areas (located primarily in the western and northwestern portion of the country along the Iraqi boarder); second, its capacity to control Gulf shipping, both to defend its own oil transportation and shipping facilities in the Gulf region (90 percent of Iran's oil must pass through the Gulf's Straits of Hormuz) and to interdict the shipping of other states. Despite severe economic problems, Iran continues to invest a significant amount of its resources, and the overwhelming majority of its military budget, to achieve these objectives.

Iran's second vital national interest, its perceived need for ascendancy in the hierarchy of nations, manifests itself as an attempt to regain what it regards as its traditional position of preeminence in the Gulf. Iran's drive for dominance of the Gulf region supports its national

security imperatives by giving it more freedom to protect its SCOG. With greater political-military power, Iran can concurrently reduce the risk of Gulf instability (on its terms), as well as deter actions that could disrupt its SCOG. Moreover, Iran's drive for ascendancy in the Gulf region includes other political and economic factors such as its ideological charge to spread the "Islamic Revival."

Iran's quest for preeminence in the Gulf is clearly evident in its military strategy. The Islamic Republic's acquisition of modern submarines, advanced fighter aircraft, antiship missiles, the reinforcement of southern Gulf islands, and its burgeoning weapons of mass destruction (WMD) program testify to its capacity to interdict strategic sea lines of communication (SLOC) in the Gulf region and eventually, given its current rate of progress, its ability to deliver theater-range (2,000 km) WMD. Iran has purposefully developed a military force that must be reckoned with. The US, most other Gulf states and most industrialized Western countries view Iran's efforts to control the Gulf's waterways as a menace to Gulf stability and a direct threat to their vital national interests.

Nonetheless, Iran's resurgence as a military power has confirmed its accession as the Gulf's dominant naval power, its establishment as one of the region's significant airpowers, and its status as an incipient nuclear power. Combined, these factors help legitimize Iran's role as the Gulf's regional leader, in direct support of its NSS.

Key to its military resurgence has been the evolution of Iran's deterrent sea denial strategy and the sustainment of that strategy. Iran has spent several billion dollars for new systems and conducts a diverse number of exercises that include amphibious operations, blocking of sea routes, mining, air-delivered maritime strikes, special operations, combined arms operations, medium-range WMD-armed missile attacks, and chemical warfare exercises. While Tehran's force modernization does protect its legitimate (defensive) security interests of coastal

defense, it also demonstrates to Gulf states and the West alike its commitment to fielding a military force to be reckoned with. Thus, the extent and pace of Iranian military resurgence has already helped Iran achieve a prominence in the Gulf while simultaneously providing it a viable coercive tool.

Iran's WMD programs are innately complementary with its deterrent sea denial strategy. Iran is committed to its nuclear weapons program for reasons of deterrence, prestige, and economy. Although an indigenous nuclear weapons production capability is possible by the turn of the century or shortly thereafter, US led counterproliferation efforts may extend that timeline. The Islamic Republic's ballistic missile program is also expanding, focusing primarily on medium-range ballistic missiles. Either of these programs will afford Tehran a significant measure of coercive potential over its neighbors and, possibly, its rivals (e.g., Israel).

Of particular concern is that one or more internal factors (faltering economy, population increases, resource depletion, ethnic/sectarian issues, and reduced oil exports) may force Iran to look outside for crises, distractions, and excuses in pursuit of regime survival, unity and the maintenance of territorial integrity. Iran may find itself relying again on the traditional use of its military as validated by the Iran-Iraq War: to confirm the revolutionary government by keeping the populace politically mobilized and focused away from domestic political and economic issues.

Currently, the Islamic Republic survives in Iran simply because there is no credible alternative. If any such alternative did emerge, the regime could collapse quickly, like the regime of the Shah in 1979. However, its survival for another decade or more is conceivable. This is due not only to the informal and formal limitations on acceding to political power, but also to the ruling clerical establishment's enormous devotion to persecuting opposition. Officially sponsored gangs beat up more mild opponents, while hit squads hunt down and

assassinate harsher critics, even abroad. Growth of a strong, organized opposition will undoubtedly take some time.

The leaders of the Islamic Republic continue to pursue a nationalistic foreign policy, inherited from the Shah, of regional hegemony to protect Iran's SCOG. Regional hegemony is one of the few remnants of the revolutionary ideology that has not been proven unattainable. Furthermore, it remains broadly popular with the masses. Such a foreign policy does much to bolster Iranian nationalist pride. Such as foreign policy enhances Iran's role as a major force on the world scene by promoting Iran's position as an influential player in the Arab-Israeli conflict and as a leader in the world's Muslim community.

Although US-led sanctions have neither caused the downfall of the Islamic regime nor reduced its radical rhetoric, they have contributed significantly to moderating the regime's behavior. The Iranian budget is under tight constraints. Given the difficulties of making adjustments elsewhere, spending on the military has decreased as Tehran's economy has worsened. Sanctions appear to have exacerbated this situation.

Iran's entrenched desire for Gulf preeminence raises the question of what exactly is the added value of such an ideology to the regime? There are four benefits that the Islamic Republic draws from its hegemonic ideology. First, it inspires leaders and social forces in other state-society complexes to act in a compliant fashion. Second, it infuses decision-makers with unity, enabling them to engage in dialogue with the international community and domestic constituents. Third, it elevates the position of one leader who becomes the chief articulator and disseminator of ideas and the mediator of ideological debates. Finally, it motivates social forces to support the pursuit of the national interest as defined by the community's leaders. In short, Iran's hegemonic ideology is a source of state power that minimizes the need for the hegemonic aspirant to actually employ coercion in the domestic and international arenas.

Iran's quest for preeminence in the Gulf region (in pursuit of Gulf stability), coupled with the deterrent focus of its NMS, and the Islamic regime's tendency toward moderation, brings into question the value of the US Navy's longtime presence in the region and the merit of the US's "dual containment strategy." The US Navy's presence in the Gulf region provides at least three benefits: tactical flexibility in escort shipping, intelligence collection, and deterrence.

US Navy warships in the Gulf provide significant tactical flexibility for US military planners to protect Western vital interests in the region. This flexibility would be impossible, or at least very difficult, to replace if US warships were to leave the region. For example, using the US Navy's Gulf-based Fifth Fleet, supertankers can be organized into convoys and escorted through the Straits of Hormuz within a few hours. Without the proximate presence of American warships, this operation would take 10 to 20 days. Moreover, regional naval forces like the Royal Saudi Navy, although the second largest in the Gulf, are frigate and patrol boat based organizations, not capable of providing supertanker air defense coverage against ASCM threats such as a C802.

In addition, the presence of US warships in the Gulf provides a significant intelligence gathering advantage and the maintenance of a "focus" in a region that vastly is important to the world at large. Not all intelligence is obtainable with satellites, or by long range reconnaissance aircraft. Gulf-based US and Allied warships are critical to the situational awareness of senior commanders and political decision-makers. Without "eyes on target" warships in the region, US situational awareness in the region would be severely limited. The US Navy has carefully monitored Iranian warships for more than 15 years. Contingencies where it becomes necessary to closely trail and deter an Iranian, or to provide immediate warning (e.g., *Iran Ajar* in 1988), would be impossible without Gulf based US naval forces. Free from harassment by US warships, a single Iranian LSL-class minelayer, or Kilo-class submarine deploying MC-52 rising

mines could, in less than an hour, close the SOH for weeks. Iran, with its three submarines, dozens of minelayers, sea and shore launched ASCMs, if pressed, could close the Straits of Hormuz (SOH) for months. Closure of the SOH for more than six months would likely raise the price of oil over the \$35 level, the price at which the West would be plunged into economic recession. The close presence of US warships in the region allows the West the flexibility to limit Iran's closure of the SOH from months to weeks, or possibly days in the case of an Iranian mining of the SOH.

While its sea denial strategy is deterrence focused, Iran has made clear that this capability is far from unemployable. In a 4 May 1997 response to US allegations of its involvement in the 1996 "Khobar Towers" bombing, which resulted in the deaths of 19 US servicemen based in Saudi Arabia, Iran made clear its intentions to close the SOH if threatened by the US: "if Iran feels that its security is threatened, it will definitely not allow the region to remain safe for the passage of oil."¹

Iran's internal socioeconomic crisis is the most significant long-term threat to its internal stability and, by inference, Gulf stability. The US policy of "dual containment" clearly exacerbates this threat to Iran. Hence, this policy, while possibly limiting Iran's diplomatic freedom of action, is antithetical to the West's need for Gulf stability. The "dual containment policy" should be reexamined in this context, and some form of US constructive engagement with Iran should carefully weighed. Until then, US naval forces in the Gulf region provide one of the West's only credible counter-deterrents to Iran's potent sea denial capability.

¹ "Iran vows to close Hormuz strait if US poses threat to its security." *The Kansas City Star*, 4 May 1997, 10(A).

BIBLIOGRAPHY

Government Documents and Publications

- Library of Congress. *The Iran-Contra Affair: The Making of a Scandal, 1983-1988 Iran: The Making of US Security Policy, 1977-1980*. Washington DC: U.S. National Security Archives, 1990.
- Library of Congress. *Iran: The Making of US Security Policy, 1977-1980*. Washington DC: U.S. National Security Archives, 1990.
- The Islamic Republic of Iran. *Constitution of the Islamic Republic of Iran*. Ottawa, Ontario, Canada: Embassy of the Islamic Republic of Iran-Canada, 1996.
- U.S. Congress. House. Committee on International Relations. *Special Report: Iran Oil Sanctions Act of 1996*. 104th Cong., 1st sess., 8 June 1996.
- U.S. Department of Defense. United States Central Command. *Challenges in the Central Region*. McDill Air Force Base, FL: United States Central Command, November 1992.
- U.S. Department of Defense. Chairman of the Joint Chiefs of Staff. *National Military Strategy of the United States of America*. Washington, DC: Government Printing Office, 1995.
- U.S. Department of Defense. Office of the Secretary of Defense. *The Bottom Up Review: Forces for a New Era*. Washington DC: Government Printing Office, 1993.
- U.S. Department of Defense. Chairman of the Joint Chiefs of Staff. *United States Security Strategy for the Middle East*, Washington DC: Government Printing Office, May 1995.
- U.S. Department of Defense. United States Central Command. *1995 Middle East Posture Statement*. McDill Air Force Base, FL: United States Central Command, 1995.
- U.S. Department of Defense. United States Central Command. *1996 Middle East Posture Statement*. McDill Air Force Base, FL: United States Central Command, 1996.
- U.S. Department of the Navy, U.S. Navy AEGIS Training Center. *Case Study - USS Vincennes, AEGIS Officer Console Operator Course S-2f-4641*. Wallops Island, VA: US Navy AEGIS Training Unit Wallops Island, December 1993.

- U.S. Department of the Navy, Chief of Naval Operations. *National Maritime Strategy Paper - Forward from the Sea*, Washington DC: Government Printing Office, 1995.
- U.S. Department of State, Christopher Warren, Secretary of State. *Presidential Executive Order Expands US Sanctions Against Iran*. Washington DC: US Department of State Dispatch, 8 May 1995.
- U.S. Department of State, Christopher Warren, Secretary of State. *Presidential Executive Order Expands US Sanctions Against Iran*. Washington DC: US Department of State Dispatch, 19 May 1995.
- U.S. Department of State, *CIA Fact Book, 1995: Iran*. Washington DC: US State Department Background Notes Office, 1995.

Books

- Abrahamian, Ervand. *Khomeinism: Essays on the Islamic Republic*. Berkeley, CA: University of California Press, 1994.
- Al-Kawari, Hamad. *The Decision-Making Process of the UN Security Council: The Iran-Iraq War as a Case Study*. New York: State University of New York at Stony Brook, 1995.
- Arnett, Eric. *Iran: Threat Perceptions and Military Confidence-Building Measures*. Stockholm, Sweden: Stockholm International Peace Research Institute, 1992.
- _____. *Sea-Launched Cruise Missiles and US Security*. New York Praeger, Inc., 1992.
- Benard and Khalizad. *The Government of God: Iran's Islamic Republic*. New York: Columbia University Press, 1984.
- Chubin, Sharam, and Charles Tip. *Iran and Iraq at War*. London, UK: I.B. Tauris & Co, Ltd., 1988.
- Cordesman, Anthony. *Iran & Iraq: The Threat from the Northern Gulf*. Oxford, UK: Westview Press, 1994.
- _____. *The Iran-Iraq War and Western Security 1984-1987*. London, UK: The Royal United Services Institute, 1987.
- Eddy, Paul. *War in the Falklands*. London, UK: Harper & Row, Publishers, Inc., 1982.
- Ehrenberg, Eckehart. *Rüstung und Wirtschaft am Golf: Iran und sein Nachbarn (1965-1978)*. Bonn, Germany: Aus Politik und Zeitgeschichte, 1979.
- Ehteshami, Anoushiravan. *After Khomeini*. London, UK: Routledge, 1995.

- Fuller, Graham. *Central Asia: The New Geopolitics*. Santa Monica, CA: National Defense Research Institute-Rand, 1992.
- Fisher, W. B. *The Middle East: North Africa 1993, 39th ed.* Washington DC: Alfred A. Knopf, 1993.
- Guttry, Andera, and Ronsitti. *The Iran-Iraq War (1980-1988) and the Law of Land Warfare*. Cambridge, UK: Cambridge University Press, 1993.
- Hiro, Dilip. *The Longest War; The Iran-Iraq Military Conflict*. New York: Routledge, Chapman & Hall, Inc., 1991.
- Hume, Cameron. *The United Nations, Iran, and Iraq: How Peace Making Changed*. Washington, DC: Georgetown University Press, 1994.
- Jane's *All the World's Aircraft-Aircraft Weapon Systems*. Thorton Heath, UK: Jane's Information Group, 1995.
- Jane's *All the World's Aircraft 1997*. Thorton Heath, UK: Jane's Information Group, 1996.
- Jane's *Fighting Ships, 1959*. Thorton Heath, UK: Jane's Information Group, 1958.
- Jane's *Fighting Ships 1997*. Thorton Heath, UK: Jane's Information Group, 1996.
- Karsh, Efraim. *The Iran Iraq War: A Military Analysis*. London, UK: The [London] International Institute for Strategic Studies, 1987.
- Krasik, Theodore. *Azerbaijan, Central Asia, and Future Persian Gulf Security*. Santa Monica, CA: National Defense Research Institute-Rand, 1993.
- Lenczowski, George. *Iran Under the Pahlavis*. Stanford, CA: Hoover Institute Press, 1978.
- Lesser, Ian O. *OIL, The Persian Gulf, and Grand Strategy: Contemporary Issues in Historical Perspective*. Santa Monica, CA: National Defense Research Institute-Rand, 1991.
- Limbert, John W. *Iran at War with History*. London, UK: Croom Helm Ltd., 1987.
- Mazarei, Adnan. *Oil, the Parallel Market for Foreign Exchange and the Macroeconomy; Essays on the Economy of Post Revolutionary Iran*. New York: Crane Russak, 1995.
- Plaowski, Dick. *Changes in Threat Air Combat Doctrine and Force Structure, 24th Edition*, Fort Worth, TX: General Dynamics, 1992.
- Schahgaldian, Nikola. *Iran and Postwar Security in the Persian Gulf*. Santa Monica CA: National Defense Research Institute-Rand, 1991.

- _____. *The Iranian Military Under the Islamic Republic*. Santa Monica CA: National Defense Research Institute-Rand, 1987.
- Strachey, John. *On The Prevention of War*. New York: St Martin's Press, 1962.
- *Strategic Survey 1973*. London, UK: The [London] International Institute for Strategic Studies, 1973.
- *Strategic Survey 1987-1988*. London, UK: The [London] International Institute for Strategic Studies, 1988.
- Strategic Survey 1993-1994*. London, UK: The [London] International Institute for Strategic Studies, 1994.
- Strategic Survey 1995-1996*. London, UK: The [London] International Institute for Strategic Studies, 1996.
- The Cambridge History of Iran*. Cambridge UK; Cambridge University Press, 1991.
- The Middle East and North Africa 1997*. London UK; Europa Publications, Ltd., 1996.
- The Military Balance 1963-1964*. London UK; The [London] Institute for Strategic Studies, 1963.
- The Military Balance 1969-1970*. London UK; The [London] Institute for Strategic Studies, 1969
- The Military Balance 1978-1979*. London UK; The [London] Institute for Strategic Studies, 1979
- The Military Balance 1988-1989*, London, UK: International Institute for Strategic Studies, 1988.
- The New Grolier Multimedia Encyclopedia*. New York: Grolier Inc., 1992, Vol 25, pp. 15-20.
- Zangeneh, Hamid. *Islam, Iran, and World Stability*, New York: St. Martin Press, 1994.

Articles

- Amirhamadi, Hooshang, Dr. "Emerging Civil Society in Iran." *SAIS Review-Johns Hopkins University Press* 16, no. 2, (November 1996): 87-107.
- _____. "Iran's Power Structure." *Iran, Special Report-Rutgers University Press*, (March 1996): 1-3.
- Arnett, Eric. "How to Reduce Threats to Peace and General Security." *Accademia Nazionale dei Lincei: Report*, (Fall 1994): 1-10.

- _____. "Military Technology and Conflict in Southern Asia." *SIPRI: Report*, (October 1995): 6-9.
- Avery, Peter. "Balancing Factors in Irano Islamic Politics and Society." *The Middle East Journal* 50, no. 2 (Spring 1996): 179-191.
- Banks, Tony and James Bruce. "Iran Builds Its Strength." *Jane's Defense Weekly*, (1 February 1992): 158-159.
- Beichman, Arnold. "Arms and the Goals of Iran." *Washington Post*, 1 March 1992, 3(B).
- Ben-Meir, Alon. "The Dual Containment Strategy is No Longer Viable." *Middle East Policy* IV, no. 3 (March 1996): 58-71.
- Benuazizi, Ali. "Iran's Revolutionary Impasse: Political Factionalism and Societal Resistance." *Middle East Report*, (November-December 1994): 6.
- Bodansky, Youssef. "Iran's Gulf Strategy Emerges Through Its Recent Military Exercises." *Defense & Foreign Affairs* 22, no. 1 (January 1994): 4-5.
- Bruce, James. "New Arms Race in the Gulf." *Jane's Intelligence Review* VII, no. 1 (November 1995): 37-39.
- Bussert, James. "Modernized Iranian Navy Poses New Gulf Dilemma." *Signal*, (October 1996): 38-41.
- Caldwell, Dan. "Flashpoints in the Gulf: Abu Musa and the Tunb Islands." *Middle East Policy* IV, no. 3 (March 1996): 50-57.
- "Choking the Strait--Iranian Naval Fire Power and the Threat to Gulf Shipping." *Jane's Intelligence Review*, (September 1996): 411-414.
- Clawson, Patrick. "Can We Coexist With Iran." *USA Today*, 11 March 1997, 14-17(A).
- Crockett, Benjamin. "Iran: A Contender for Mideast Hegemony." *Military Intelligence* 19, no. 4, (October-December 1993): 15-19.
- Cumming-Bruce, Nicholas. "West Germans, Dutch Compete For Massive Naval Orders." *Middle East Economic Digest*, (March 1978): 13
- Davis, Dale. "Iran's Strategic Philosophy and Growing Sea-denial Capabilities." *Marine Corps Gazette* 79, no. 7 (July 1995): 20-22.
- Dannruther, Roland. "Russia, Central Asia and the Persian Gulf." *Survival*, (Winter 1993): 92-112.
- Dwyer, John. "In Harm's Way in the Gulf." *Military History* 7, no. 5 (March 1991): 43-45.

- "Egypt Threatens Iran." *The New York Times*, 18 April 1993, 8(A).
- Ehteshami, Anoushiravan. "Iran's National Strategy, Striving for Regional Parity or Supremacy." *International Defense Review* 27, no. 4 (April 1994): 27-31.
- "Fath-3 Military Exercise Planned in Persian Gulf." *Netiran-IRNA*, 1 January 1994, 1.
- Finnegan, Philip. "Red Flags Over Iran's Navy." *Navy Times* 43, no. 11 (20 December 1993): 34-35.
- "From Tehran to Waco: Rafsanjani Talks tough on Clinton." *Washington Post*, 9 July 1995, 3(C).
- Gerardi & Aharinejad. "Report: An assessment of Iran's Nuclear Facilities." *The Non-Proliferation Review* 2, no. 3 (Spring-Summer 1995): 1-6.
- Ghazi, Katayoun. "From Friday Prayers to Video Nights." *New York Times*, 18 February 1995, 4(A).
- Hooton, Ted. "The Tanker War in the Gulf, 1984-88." *Jane's Intelligence Review* 4, no. 5 (May 1992): 218-221.
- Hough, Harold. "Iranian Intentions...the Strait of Hormuz or Beyond?." *Jane's Intelligence Review* 7, no. 10 (October 1995): 454-457.
- Homayoun, Assad. "Iran's Presidential Elections Offer No Prospect of a Change in Strategic Adventurism." *Defense & Foreign Affairs Strategic Policy* 21, no. 6 (June 1993): 16-18.
- "Iran: An Economy in Disarray." *The Middle East*, (December 1994): 28-29.
- "Iran and Pakistan Stage Joint Maneuver." *Netiran-IRNA*, 20 February 1994, 1.
- "Iran Increases Arms Supply." *Associated Press*, 31 January 1996, 1.
- "Iran's Naval units Launched Maneuvers." *Netiran-IRNA*, 4 February 1995, 1.
- "Iran's Massive Buildup." *International Defense Review* 4, (April 1978): 301-305.
- "Iran Policy Hardens." *Middle East Insight*, (March/April 1995): 4-5.
- "Iran Re-Builds its Air Force." *London Financial Times*, 8 February 1993, 4.
- "Iran vows to close Hormuz strait if US poses threat to its security." *The Kansas City Star*, 4 May 1997, 10(A).
- "Iranian Silkworm missile hits US-Flagged Ship in Kuwait." *The Washington Post*, 17 October 1987, 16(A).

- "Iranian Navy should be able to respond to any future threat." *'Kayhan International*, (December 1995); reprint, *Netiran-IRNA*, 11 December 1995, 1.
- "Iran's Leaders Threaten US." *The Guardian*, (20 April 1988): 1.
- "Iran's New Submarines." *Defense News*, 17 February 1992, 1.
- "Iran-Omani Military Cooperation Guarantees Persian Gulf Security." *Netiran-IRNA*, 15 December 1997, 1.
- "The C-802 Silkworm." *Jane's Naval Weapon Systems 21* (August 1996): 1-8.
- Jacobs, Gordon, and Tim McCarthy. "China missile sales--Few Changes for the Future." *Jane's Intelligence Review* (December 1992): 559-563.
- "Special Report Number 6: Iran's Weapon's of Mass Destruction." *Jane's Intelligence Review* (November 1995): 1-35.
- Joffe, George. "Iran - Tearing Itself Apart?" *Jane's Intelligence Review* (October 1995): 446-457.
- Jordan, John. "The Iranian Navy." *Jane's Intelligence Review* (May 1992): 213-217.
- Kalilzad, Zalmai. "United States and the Persian Gulf: Preventing Regional Hegemony." *Survival* (Summer 1995): 95-120.
- Kraska, James. "Gatekeepers of the Gulf." *US Naval Institute Proceedings* (March 1994): 45-47.
- Milani, Moshen. "The Transformation of the Velayat-e-Faqih Institution: From Khomeini to Khomeini." *The Moslem World* (July-October 1992): 180-189.
- "Military Intelligence Analysts at Odds with State Department over Iran War Scenario." *Inside the Air Force* (February 1992): 1-2.
- Miller, David. "Submarines in the Gulf." *Military Technology* (June 1993): 42-45.
- "Mine Sweeping Operations Conducted during Victory Six Wargames." *Netiran-IRNA*, 4 July 1995, 1.
- "Navy Commander, Pak Premier Call for Consolidation of Ties." *Netiran-IRNA*, 6 February 1994, 1.
- "Navy to launch Two Maneuvers in Persian Gulf, Caspian Sea." *Netiran-IRNA*, 25 November 1995, 1.
- "New Iraqi Offensive in the Gulf." *The Times*, 06 July 1988, 1.

- Peay III, J.H. Binford, Commander United States Central Command, "Statement before the House Committee on National Security." *Congressional Record* (March 1996).
- "Persian Gulf Instability Will Not Benefit Any Littoral State, Says President." *Netiran-IRNA*, 20 December 1994, 1.
- "Persian Gulf-Khabar Amphibious Maneuvers Underway in Persian Gulf." *Netiran-IRNA*, 23 September 1995, 1.
- Petrosian, Vahe. "Iran: US Announces Total Ban to Mixed International Reception." *Middle East Economic Digest* (May 1995): 25.
- "President Comments on Rushdie Affair." *Iran Times*, 2 June 1995, 1.
- Prim, Shankar. "Fascist Impulse in Developing Countries: Two Case Studies." *Studies in Conflict and Terrorism* 17, no. 3 (July-September 1994): 229-274.
- Rathmell, Andrew. "Iran's Liquid Lifeline." *Jane's Intelligence Review* 7, no. 9 (September 1995): 411-414.
- _____. "Iran's Rearmament--How Great a Threat?" *Jane's Intelligence Review* 6, no. 7 (July 1994): 317-322.
- "Realistic Approach Required for Persian Gulf Security." *Netiran-Iran News*, 5 November 1994, 1-2.
- "Reagan, Aids Weigh Response to damaging of Ship in Gulf." *The Washington Post*, 16 April 1988, 1.
- Reich & Gotowicki. "The United States and the Persian Gulf in the Bush Administration After the Gulf War." In *Brassey's Defense Yearbook*, 1-8. London, UK.: Royal United Services Institute, 1992.
- Rizvi, Ali Abbas. "Iran's Armed Forces." *Asian Defense Journal* 9 (September 1994): 32-34.
- Roberts, Mark. "Khomeini's Incorporation of the Iranian Military." *McNair Papers* 48 (January 1996): 1-89.
- "Russian Fencers for Sale." *Aviation Week and Space Technology*, 10 April 1989, 19-20.
- Sanger, David E. "Fear, Inflation and Graft Feed Disillusion among Iranians." *New York Times*, 30 May 1995, 6(A).
- Sabari, Farzin. "The Post-Khomeini Era in Iran." *The Middle East Journal* (Winter 1994): 89-107.
- Segal, David. "The Iran-Iraq War: A Military Analysis." *Foreign Affairs* (Summer 1988): 940-951.

Silverberg and Tusa. "Shadow Over the Gulf: Iran is Preparing-But for What?" *Armed Forces Journal-International* (August 1995): 24, 27-30.

Shirley, Edward. "Fundamentalism in Power; Is Iran's Present Algeria's Future?." *Foreign Affairs* (May/June 1995): 29-44.

_____. "The Iran Policy Trap." *Foreign Policy* (Fall 1994): 84-85.

"Submarine Showdown in the Gulf." *Defense News*, 1 March 1993, 1.

Tehran Domestic Service in Persian. "US Warned of Harsh Response." 18 April 1988, FBIS-LD181743.

Tehran Domestic Service in Persian. "Foreign Ministry Issues Statement." 22 September 1987, FBIS-LD221120.

Tehran IRNA in Persian. "5-Day 'Khabar-75 Maneuvers end in the Gulf." 24 May 1996, FBIS-LD2405152896.

Tehran IRNA in Persian. "New Commander for the Guard Corps Named." 24 December 1990, FBIS-NES-90-247.

Tehran-IRNA in Persian. "Naval Exercises Continue in Persian Gulf." 14 April 1996, FBIS-LD1404161496

Tehran-IRNA in Persian. "Naval Maneuvers Continue in Persian Gulf." 13 April 1996, FBIS-LD1304173096

Tehran-IRNA in Persian. "New Commander for the Guard Corps Named." 24 December 1990, FBIS-LD-NES-90-247.

Tehran-IRNA in Persian. "Rasfanjani Vows Retaliation." 22 September 1987, FBIS-LD220827.

Tehran-IRNA in Persian. "Reportage on US attacks on Oil Platforms." 18 April 1988, FBIS-LD180658.

Tehran-IRNA in Persian. "US Preventing Rescue." 22 April 1988, FBIS-LD182028.

Tehran-Voice of the Islamic Republic of Iran in Persian. "Reports on Rafsanjani Remarks to Foreign Diplomats." 9 February 1996, FBIS-NC092091196.

Tehran-Voice of the Islamic Republic of Iran in Persian. "Third Phase of Joint Exercise Completed." 22 May 1996, FBIS-LD2505113696.

"Third Phase of Victory-Six Navy Maneuver Ends." *Netiran-IRNA*, 9 July 1995, 1.

- "Tied Economy, Tied President." *The Economist* (16 July 1994): 37-38.
- "Tragedy in Kashmir." *Iran Times*, 12 May 1995, 15(A).
- Tusa, Francis. "Iran Bides Its Time." *Armed Forces Journal-International* 131, no. 4 (November 1993): 19-21.
- "US Sinks 6 Iranian Ships in Gulf Battles." *The Washington Post*, 19 April 1988, 1.
- "US Strikes 2 Iranian Oil Rigs and Hits 6 Warships in Battles Over mining Sea Lanes In Gulf." *The New York Times*, 19 April 1988, 1.
- "US Destroyers Shell Iranian Oil Platform in Gulf." *The Washington Post*, 20 October 1987, 1.
- "US Military Leaders Prepare Plans for Possible Retaliation." *The Washington Post*, 17 October 1987, 16(A).
- "US-Owned Oil Platform Attacked." FBIS-NC181052 *Paris AFP in English*, 18 April, 1988.
- "US Mission in Gulf Expands - President Orders Navy to Protect Neutral Shipping." *The Washington Post*, 30 April 1988, 1.
- "US Submarines Show the Flag in the Gulf." *The Washington Times*, 16 January 1994, 4(G).
- Waldman, Peter. "The Iranian Economy Takes Another Turn, but Where is it Going?" *The Wall Street Journal*, 11 May 1995, 10(A).
- Zahedi, Dariush and Ahmak Ghoreishi. "Iran's Security Concerns in the Persian Gulf." *Naval War College Review* (Summer 1996): 75-87.
- "1st Stage of Victory-Six Wargame Ends Successfully." *Netiran-IRNA*, 9 July 1995, 1.
- "3rd Phase of Victory-4 Maneuvers Launched." *Netiran-IRNA*, 29 April 1993, 1.

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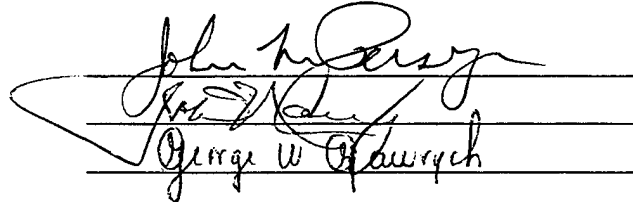
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L	Critical Technology (3) / Sect. 4 / 31
E	Administrative Operational Use (7) / Chapter 2 / 13-32
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